## TABLES OF

## Compound Interest Functions

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Logarithms of compound Interest Functions

JAMES W. GLOVER
HARRY C. CARVER


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## TABLES

of

## Compound Interest Functions

and

# Logarithms of Compound Interest Functions 

4<br>By<br>JAMES W. GLOVER<br>Professor of Malhematics and Insurance,<br>University of Michigan<br>and<br>HARRY C. CARVER

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## PREFACE

THESE tables are intended to be used in connection with college texts on the mathematics of investment and finance. Bankers, engineers, and actuaries will also find them of service in compound interest calculations.

Fourteen tables of values of compound interest functions are given, eight of which are expressed in natural numbers and six in logarithms. The natural numbers are given to eight and the logarithms to seven places of decimals. They are given for 100 years or periods and for the following sixteen rates of interest: $1 \%, 11 / 4,11 / 2 \%, 13 \% \%, 2 \%, 21 / 4 \%, 21 / 2 \%, 23 \%, 3 \%, 31 / 2 \%$, $4 \%, 41 / 2 \%, 5 \%, 51 / 2 \%, 6 \%, 7 \%$. These rates will be found to cover most of the financial transactions occurring in practice.

The auxiliary tables VI, VII, V III, IX, X, XI, will be found very useful in connection with calculations involving frequent interest conversions and installment payments.

The logarithmic tables are designed to facilitate the work of computation where arithmometers are not available; they may also be employed to familiarize the student with the use of logarithms.

Ann Arbor, Michigan
September, 1921

James W. Glover
Harry C. Carver

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TABLE I.
$(1+i)^{n}$

| n | $1 \%$ | 11/4C | 11/2\% | 13\% | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.01000000 | 1.01250000 | 1.01500000 | 1.01750000 | 1 |
| 2 | 1.02010000 | 1.02515625 | 1.03022500 | 1.03530625 | 2 |
| 3 | 1.03030100 | 1.03797070 | 1.04567838 | 1.05342411 | 3 |
| 4 | 1.04060401 | 1.05094534 | 1.06136355 | 1.07185903 | 4 |
| 5 | 1.05101005 | 1.06408215 | 1.07728400 | 1.09061656 | 5 |
| 6 | 1.06152015 | 1.07738318 | 1.09344326 | 1.10970235 | 6 |
| 7 | 1.07213535 | 1.09085047 | 1.10984491 | 1.12912215 | 7 |
| 8 | 1.08285671 | 1.10448610 | 1.12649259 | 1.14888178 | 8 |
| 9 | 1.09368527 | 1.11829218 | 1.14338998 | 1.16898721 | 9 |
| 10 | 1.10462213 | 1.13227083 | 1.16054083 | 1.18944449 | 10 |
| 11 | 1.11566835 | 1.14642422 | 1.17794894 | 1.21025977 | 11 |
| 12 | 1.12682503 | 1.16075452 | 1.19561817 | 1.23143931 | 12 |
| 13 | 1.13809328 | 1.17526395 | 1.21355244 | 1.25298950 | 13 |
| 14 | 1.14947421 | 1.18995475 | 1.23175573 | 1.27491682 | 14 |
| 15 | 1.16096896 | 1.20482918 | 1.25023207 | 1.29722786 | 15 |
| 16 | 1.17257864 | 1.21988955 | 1.26898555 | 1.31992935 | 16 |
| 17 | 1.18430443 | 1.23513817 | 1.28802033 | 1.34302811 | 17 |
| 18 | 1.19614748 | 1.25057739 | 1.30734064 | 1.36653111 | 18 |
| 19 | 1.20810895 | 1.26620961 | 1.32695075 | 1.39044540 | 19 |
| 20 | 1.22019004 | 1.28203723 | 1.34685501 | 1.41477820 | 20 |
| 21 | 1.23239194 | 1.29806270 | 1.36705783 | 1.43953681 | 21 |
| 22 | 1.24471586 | 1.31428848 | 1.38756370 | 1.46472871 | 22 |
| 23 | 1.25716302 | 1.33071709 | 1.40837715 | 1.49036146 | 23 |
| 24 | 1.26973465 | 1.34735105 | 1.42950281 | 1.51644279 | 24 |
| 25 | 1.28243200 | 1.36419294 | 1.45094535 | 1.54298054 | 25 |
| 26 | 1.29525631 | 1.38124535 | 1.47270953 | 1.56998269 | 26 |
| 27 | 1.30820888 | 1.39851092 | 1.49480018 | 1.59745739 | 27 |
| 28 | 1.32129097 | 1.41599230 | 1.51722218 | 1.62541290 | 28 |
| 29 | 1.33450388 | 1.43369221 | 1.53998051 | 1.65385762 | 29 |
| 30 | 1.34784892 | 1.45161336 | 1.56308022 | 1.68280013 | 30 |
| 31 | 1.36132740 | 1.46975853 | 1.58652642 | 1.71224913 | 31 |
| 32 | 1.37494068 | 1.48813051 | 1.61032432 | 1.74221349 | 32 |
| 33 | 1.38869009 | 1.50673214 | 1.63447918 | 1.77270223 | 33 |
| 34 | 1.40257699 | 1.52556629 | 1.65899637 | 1.80372452 | 34 |
| 35 | 1.41660276 | 1.54463587 | 1.68388132 | 1.83528970 | 35 |
| 36 | 1.43076878 | 1.56394382 | 1.70913954 | 1.86740727 | 36 |
| 37 | 1.44507647 | 1.58349312 | 1.73477663 | 1.90008689 | 37 |
| 38 | 1.45952724 | 1.60328678 | 1.76079828 | 1.93333841 | 38 |
| 39 | 1.47412251 | 1.62332787 | 1.78721025 | 1.96717184 | 39 |
| 40 | 1.48886373 | 1.64361946 | 1.81401841 | 2.00159734 | 40 |
| 41 | 1.50375237 | 1.66416471 | 1.84122868 | 2.03662530 | 41 |
| 42 | 1.51878989 | 1.68496677 | 1.86884712 | 2.07226624 | 42 |
| 43 | 1.53397779 | 1.70602885 | 1.89687982 | 2.10853090 | 43 |
| 44 | 1.54931757 | 1.72735421 | 1.92533302 | 2.14543019 | 44 |
| 45 | 1.56481075 | 1.74894614 | 1.95421301 | 2.18297522 | 45 |
| 46 | 1.58045885 | 1.77080797 | 1.98352621 | 2.22117728 | 46 |
| 47 | 1.59626344 | 1.79294306 | 2.01327910 | 2.26004789 | 47 |
| 48 | 1.61222608 | 1.81535485 | 2.04347829 | 2.29959872 | 48 |
| 49 | 1.62834834 | 1.83804679 | 2.07413046 | 2.33984170 | 49 |
| 50 | 1.64463182 | 1.86102237 | 2.10524242 | 2.38078893 | 50 |

## Amount of 1 at Compound Interest

TABLE I.
$(1+i)^{n}$

| $n$ | $1 \%$ | 14\% | 1\%\% | 13. | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.66107814 | 1.88428515 | 2.13682106 | 2.42245274 | 51 |
| 52 | 1.67768892 | 1.90783872 | 2.16887337 | 2.46484566 | 52 |
| 53 | 1.69446581 | 1.93168670 | 2.20140647 | 2.50798046 | 53 |
| 54 | 1.71141047 | 1.95583279 | 2.23442757 | 2.55187012 | 54 |
| 55 | 1.72852457 | 1.98028070 | 2.26794398 | 2.59652785 | 55 |
| 56 | 1.74580982 | 2.00503420 | 2.30196314 | 2.64196708 | 56 |
| 57 | 1.76326792 | 2.03009713 | 2.33649259 | 2.68820151 | 57 |
| 58 | 1.78090060 | 2.05547335 | 2.37153998 | 2.73524503 | 58 |
| 59 | 1.79870960 | 2.08116676 | 2.40711308 | 2.78311182 | 59 |
| 60 | 1.81669670 | 2.10718135 | 2.44321978 | 2.83181628 | 60 |
| 61 | 1.83486367 | 2.13352111 | 2.47986807 | 2.88137306 | 61 |
| 62 | 1.85321230 | 2.16019013 | 2.51706609 | 2.93179709 | 62 |
| 63 | 1.87174443 | 2.18719250 | 2.55482208 | 2.98310354 | 63 |
| 64 | 1.89046187 | 2.21453241 | 2.59314442 | 3.03530785 | 64 |
| 65 | 1.90936649 | 2.24221407 | 2.63204158 | 3.08842574 | 65 |
| 66 | 1.92846015 | 2.27024174 | 2.67152221 | 3.14247319 | 66 |
| 67 | 1.94774475 | 2.29861976 | 2.71159504 | 3.19746647 | 67 |
| 68 | 1.96722220 | 2.32735251 | 2.75226896 | -3.2534 2213 | 68 |
| 69 | 1.98689442 | 2.35644442 | 2.79355300 | 3.31035702 | 69 |
| 70 | 2.00676337 | 2.38589997 | 2.83545629 | 3.36828827 | 70 |
| 71 | 2.02683100 | 2.41572372 | 2.87798814 | 3.42723331 | 71 |
| 72 | 2.04709931 | 2.44592027 | 2.92115796 | 3.48720990 | 72 |
| 73 | 2.06757031 | 2.47649427 | 2.96497533 | 3.54823607 | 73 |
| 74 | 2.08824601 | 2.50745045 | 3.00944996 | 3.61033020 | 74 |
| 75 | 2.10912847 | 2.53879358 | 3.05459171 | 3.67351098 | 75 |
| 76 | 2.13021975 | 2.57052850 | 3.10041059 | 3.73779742 | 76 |
| 77 | 2.15152195 | 2.60266011 | 3.14691674 | 3.80320888 | 77 |
| 78 | 2.17303717 | 2.63519336 | 3.19412050 | 3.86976503 | 78 |
| 79 | 2.19476754 | 2.66813327 | 3.24203230 | 3.93748592 | 79 |
| 80 | 2.21671522 | 2.70148494 | 3.29066279 | 4.00639192 | 80 |
| 81 | 2.23888237 | 2.73525350 | 3.34002273 | 4.07650378 | 81 |
| 82 | 2.26127119 | 2.76944417 | 3.39012307 | 4.14784260 | 82 |
| 83 | 2.28388390 | 2.80406222 | 3.44097492 | 4.22042984 | 83 |
| 84 | 2.30672274 | 2.83911300 | 3.49258954 | 4.29428737 | 84 |
| 85 | 2.32978997 | 2.87460191 | 3.54497838 | 4.36943740 | 85 |
| 86 | 2.35308787 | 2.91053444 | 3.59815306 | 4.44590255 | 86 |
| 87 | 2.37661875 | 2.94691612 | 3.65212535 | 4.52370584 | 87 |
| 88 | 2.40038494 | 2.98375257 | 3.70690723 | 4.60287070 | 88 |
| 89 | 2.42438879 | 3.02104948 | 3.76251084 | 4.68342093 | 89 |
| 90 | 2.44863267 | 3.05881260 | 3.81894851 | 4.76538080 | 90 |
| 91 | 2.47311900 | 3.09704775 | 3.87623273 | 4.84877496 | 91 |
| 92 | 2.49785019 | 3.13576085 | 3.93437622 | 4.93362853 | 92 |
| 93 | 2.52282869 | 3.17495786 | 3.99339187 | 5.01996703 | 93 |
| 94 | 2.54805698 | 3.21464483 | 4.05329275 | 5.10781645 | 94 |
| 95 | 2.57353755 | 3.25482789 | 4.11409214 | 5.19720324 | 95 |
| 96 | 2.59927293 | 3.29551324 | 4.17580352 | 5.28815429 | 96 |
| 97 | 2.62526565 | 3.33670716 | 4.23844057 | 5.38069699 | 97 |
| 98 | 2.65151831 | 3.37841600 | 4.30201718 | 5.47485919 | 98 |
| 99 | 2.67803349 | 3.42064620 | 4.36654744 | 5.57066923 | 99 |
| 100 | 2.70481383 | 3.46340427 | 4.43204565 | 5.66815594 | 100 |

## Amount of 1 at Compound Interest

TABLE I.
$(1+i)^{n}$

| n | $2 \%$ | $21{ }_{0}$ | $212 \%$ | $23 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.02000000 | 1.02250000 | 1.02500000 | 1.02750000 | 1 |
| 2 | 1.04040000 | 1.04550625 | 1.05062500 | 1.05575625 | 2 |
| 3 | 1.06120800 | 1.06903014 | 1.07689063 | 1.08478955 | 3 |
| 4 | 1.08243216 | 1.09308332 | 1.10381289 | 1.11462126 | 4 |
| 5 | 1.10408080 | 1.11767769 | 1.13140821 | 1.14527334 | 5 |
| 6 | 1.12616242 | 1.14282544 | 1.15969342 | 1.17676836 | 6 |
| 7 | 1.14868567 | 1.16853901 | 1.18868575 | 1.20912949 | 7 |
| 8 | 1.17165938 | 1.19483114 | 1.21840290 | 1.24238055 | 8 |
| 9 | 1.19509257 | 1.22171484 | 1.24886297 | 1.27654602 | 9 |
| 10 | 1.21899442 | 1.24920343 | 1.28008454 | 1.31165103 | 10 |
| 11 | 1.24337431 | 1.27731050 | 1.31208666 | 1.34772144 | 11 |
| 12 | 1.26824179 | 1.30604999 | 1.34488882 | 1.38478378 | 12 |
| 13 | 1.29360663 | 1.33543611 | 1.37851104 | 1.42286533 | 13 |
| 14 | 1.31947876 | 1.36548343 | 1.41297382 | 1.46199413 | 14 |
| 15 | 1.34586834 | 1.39620680 | 1.44829817 | 1.50219896 | 15 |
| 16 | 1.37278571 | 1.42762146 | 1.48450562 | 1.54350944 | 16 |
| 17 | 1.40024142 | 1.45974294 | 1.52161826 | 1.58595595 | 17 |
| 18 | 1.42824625 | 1.49258716 | 1.55965872 | 1.62956973 | 18 |
| 19 | 1.45681117 | 1.52617037 | 1.59865019 | 1.67438290 | 19 |
| 20 | 1.48594740 | 1.56050920 | 1.63861644 | 1.72042843 | 20 |
| 21 | 1.51566634 | 1.59562066 | 1.67958185 | 1.76774021 | 21 |
| 22 | 1.54597967 | 1.63152212 | 1.72157140 | 1.81635307 | 22 |
| 23 | 1.57689926 | 1.66823137 | 1.76461068 | 1.86630278 | 23 |
| 24 | 1.60843725 | 1.70576658 | 1.80872595 | 1.91762610 | 24 |
| 25 | 1.64060599 | 1.74414632 | 1.85394410 | 1.97036082 | 25 |
| 26 | 1.67341811 | 1.78338962 | 1.90029270 | 2.02454575 | 26 |
| 27 | 1.70688648 | 1.82351588 | 1.94780002 | 2.08022075 | 27 |
| 28 | 1.74102421 | 1.86454499 | 1.99649502 | 2.13742682 | 28 |
| 29 | 1.77584469 | 1.90649725 | 2.04640739 | 2.19620606 | 29 |
| 30 | 1.81136158 | 1.94939344 | 2.09756758 | 2.25660173 | 30 |
| 31 | 1.84758882 | 1.99325479 | 2.15000677 | 2.31865828 | 31 |
| 32 | 1.88454059 | 2.03810303 | 2.20375694 | 2.38242138 | 32 |
| 33 | 1.92223140 | 2.08396034 | 2.25885086 | 2.44793797 | 33 |
| 34 | 1.96067603 | 2.13084945 | 2.31532213 | 2.51525626 | 34 |
| 35 | 1.99988955 | 2.17879356 | 2.37320519 | 2.58442581 | 35 |
| 36 | 2.03988734 | 2.22781642 | 2.43253532 | 2.65549752 | 36 |
| 37 | 2.08068509 | 2.27794229 | 2.49334870 | 2.72852370 | 37 |
| 38 | 2.12229879 | 2.32919599 | 2.55568242 | 2.80355810 | 38 |
| 39 | 2.16474477 | 2.38160290 | 2.61957448 | 2.88065595 | 39 |
| 40 | 2.20803966 | 2.43518897 | 2.68506384 | 2.95987399 | 40 |
| 41 | 2.25220046 | 2.48998072 | 2.75219043 | 3.04127052 | 41 |
| 42 | 2.29724447 | 2.54600528 | 2.82099520 | 3.12490546 | 42 |
| 43 | 2.34318936 | 2.60329040 | 2.89152008 | 3.21084036 | 43 |
| 44 | 2.39005314 | 2.66186444 | 2.96380808 | 3.29913847 | 44 |
| 45 | 2.43785421 | 2.72175639 | 3.03790328 | 3.38986478 | 45 |
| 46 | 2.48661129 | 2.78299590 | 3.11385086 | 3.48308606 | 46 |
| 47 | 2.53634351 | 2.84561331 | 3.19169713 | 3.57887093 | 47 |
| 48 | 2.58707039 | 2.90963961 | 3.27148956 | 3.67728988 | 48 |
| 49 | 2.63881179 | 2.97510650 | 3.35327680 | 3.77841535 | 49 |
| 50 | 2.69158803 | 3.04204640 | 3.43710872 | 3.88232177 | 50 |

TABLE I.
$(\mathbf{1}+\boldsymbol{i})^{\prime \prime}$

| $n$ | $2 \%$ | 21 \% \% | $2 \%$ | 23.0 | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 2.74541979 | 3.11049244 | 3.52303644 | 3.98908562 | 51 |
| 52 | 2.80032819 | 3.18047852 | 3.61111235 | 4.09878547 | 52 |
| 53 | 2.85633475 | 3.25203929 | 3.70139016 | 4.21150208 | 53 |
| 54 | 2.91346144 | 3.32521017 | 3.79392491 | 4.32731838 | 54 |
| 55 | 2.97173067 | 3.40002740 | 3.88877303 | 4.44631964 | 55 |
| 56 | 3.03116529 | 3.47652802 | 3.98599236 | 4.56859343 | 56 |
| 57 | 3.09178859 | 3.55474990 | 4.08564217 | 4.69422975 | 57 |
| 58 | 3.15362436 | 3.63473177 | 4.18778322 | 4.82332107 | 58 |
| 59 | 3.21669685 | 3.71651324 | 4.29247780 | 4.95596239 | 59 |
| 60 | 3.28103079 | 3.80013479 | 4.39978975 | 5.09225136 | 60 |
| 61 | 3.34665140 | 3.88563782 | 4.50978449 | 5.23228827 | 61 |
| 62 | 3.41358443 | 3.97306467 | 4.62252910 | 5.37617620 | 62 |
| 63 | 3.48185612 | 4.06245862 | 4.73809233 | 5.52402105 | 63 |
| 64 | 3.55149324 | 4.15386394 | 4.85654464 | 5.67593162 | 64 |
| 65 | 3.62252311 | 4.24732588 | 4.97795826 | 5.83201974 | 65 |
| 66 | 3.69497357 | 4.34289071 | 5.10240721 | 5.99240029 | 66 |
| 67 | 3.76887304 | 4.44060576 | 5.22996739 | 6.15719130 | 67 |
| 68 | 3.84425050 | 4.54051939 | 5.36071658 | 6.32651406 | 68 |
| 69 | 3.92113551 | 4.64268107 | 5.49473449 | 6.50049319 | 69 |
| 70 | 3.99955822 | 4.74714140 | 5.63210286 | 6.67925676 | 70 |
| 71 | 4.07954939 | 4.85395208 | 5.77290543 | 6.86293632 | 71 |
| 72 | 4.16114038 | 4.96316600 | 5.91722806 | 7.05166706 | 72 |
| 73 | 4.24436318 | 5.07483723 | 6.06515876 | 7.24558791 | 73 |
| 74 | 4.32925045 | 5.18902107 | 6.21678773 | 7.44484158 | 74 |
| 75 | 4.41583546 | 5.30577405 | 6.37220743 | 7.64957472 | 75 |
| 76 | 4.50415216 | 5.42515396 | 6.53151261 | 7.85993802 | 76 |
| 77 | 4.59423521 | 5.54721993 | 6.69480043 | 8.07608632 | 77 |
| 78 | 4.68611991 | 5.67203237 | 6.86217044 | 8.29817869 | 78 |
| 79 | 4.77984231 | 5.79965310 | 7.03372470 | 8.52637861 | 79 |
| 80 | 4.87543916 | 5.93014530 | 7.20956782 | 8.76085402 | 80 |
| 81 | 4.97294794 | 6.06357357 | 7.38980701 | 9.00177751 | 81 |
| 82 | 5.07240690 | 6.20000397 | 7.57455219 | 9.24932639 | 82 |
| 83 | 5.17385504 | 6.33950406 | 7.76391599 | 9.50368286 | 83 |
| 84 | 5.27733214 | 6.48214290 | 7.95801389 | 9.76503414 | 84 |
| 85 | 5.38287878 | 6.62799112 | 8.15696424 | 10.03357258 | 85 |
| 86 | 5.49053636 | 6.77712092 | 8.36088834 | 10.30949583 | 86 |
| 87 | 5.60034708 | 6.92960614 | 8.56991055 | 10.59300696 | 87 |
| 88 | 5.71235402 | 7.08552228 | 8.78415832 | 10.88431465 | 88 |
| 89 | 5.82660110 | 7.24494653 | 9.00376228 | 11.18363331 | 89 |
| 90 | 5.94313313 | 7.40795782 | 9.22885633 | 11.49118322 | 90 |
| 91 | 6.06199579 | 7.57463688 | 9.45957774 | 11.80719076 | 91 |
| 92 | 6.18323570 | 7.74506621 | 9.69606718 | 12.13188851 | 92 |
| 93 | 6.30690042 | 7.91933020 | 9.93846886 | 12.46551544 | 93 |
| 94 | 6.43303843 | 8.09751512 | 10.18693058 | 12.80831711 | 94 |
| 95 | 6.56169920 | 8.27970921 | 10.44160385 | 13.16054584 | 95 |
| 96 | 6.69293318 | 8.46600267 | 10.70264395 | 13.52246085 | 96 |
| 97 | 6.82679184 | 8.65648773 | 10.97021004 | 13.89432852 | 97 |
| 98 | 6.96332768 | 8.85125871 | 11.24446530 | 14.27642255 | 98 |
| 99 | 7.10259423 | 9.05041203 | 11.52557693 | 14.66902417 | 99 |
| 100 | 7.24464612 | 9.25404630 | 11.81371635 | 15.07242234 | 100 |

## Amount of 1 at Compound Interest

TABLE I.
$(1+i)^{n}$

| $n$ | $3 \%$ | $31 / \%$ | $4 \%$ | 4\%\% | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.03000000 | 1.03500000 | 1.04000000 | 1.04500000 | 1 |
| 2 | 1.06090000 | 1.07122500 | 1.08160000 | 1.09202500 | 2 |
| 3 | 1.09272700 | 1.10871788 | 1.12486400 | 1.14116613 | 3 |
| 4 | 1.12550881 | 1.14752300 | 1.16985856 | 1.19251860 | 4 |
| 5 | 1.15927407 | 1.18768631 | 1.21665290 | 1.24618194 | 5 |
| 6 | 1.19405230 | 1.22925533 | 1.26531902 | 1.30226012 | 6 |
| 7 | 1.22987387 | 1.27227926 | 1.31593178 | 1.36086183 | 7 |
| 8 | 1.26677008 | 1.31680904 | 1.36856905 | 1.42210061 | 8 |
| 9 | 1.30477318 | 1.36289735 | 1.42331181 | 1.48609514 | 9 |
| 10 | 1.34391638 | 1.41059876 | 1.48024428 | 1.55296942 | 10 |
| 11 | 1.38423387 | 1.45996972 | 1.53945406 | 1.62285305 | 11 |
| 12 | 1.42576089 | 1.51106866 | 1.60103222 | 1.69588143 | 12 |
| 13 | 1.46853371 | 1.56395606 | 1.66507351 | 1.77219610 | 13 |
| 14 | 1.51258972 | 1.61869452 | 1.73167645 | 1.85194492 | 14 |
| 15 | 1.55796742 | 1.67534883 | 1.80094351 | 1.93528244 | 15 |
| 16 | 1.60470644 | 1.73398604 | 1.87298125 | 2.02237015 | 16 |
| 17 | 1.65284763 | 1.79467555 | 1.94790050 | 2.11337681 | 17 |
| 18 | 1.70243306 | 1.85748920 | 2.02581652 | 2.20847877 | 18 |
| 19 | 1.75350605 | 1.92250132 | 2.10684918 | 2.30786031 | 19 |
| 20 | 1.80611123 | 1.98978886 | 2.19112314 | 2.41171402 | 20 |
| 21 | 1.86029457 | 2.05943147 | 2.27876807 | 2.52024116 | 21 |
| 22 | 1.91610341 | 2.13151158 | 2.36991879 | 2.63365201 | 22 |
| 23 | 1.97358651 | 2.20611448 | 2.46471554 | 2.75216635 | 23 |
| 24 | 2.03279411 | 2.28332849 | 2.56330416 | 2.87601383 | 24 |
| 25 | 2.09377793 | 2.36324498 | 2.66583633 | 3.00543446 | 25 |
| 26 | 2.15659127 | 2.44595856 | 2.77246978 | 3.14067901 | 26 |
| 27 | 2.22128901 | 2.53156711 | 2.88336858 | 3.28200956 | 27 |
| 28 | 2.28792768 | 2.62017196 | 2.99870332 | 3.42969999 | 28 |
| 29 | 2.35656551 | 2.71187798 | 3.11865145 | 3.58403649 | 29 |
| 30 | 2.42726247 | 2.80679370 | 3.24339751 | 3.74531813 | 30 |
| 31 | 2.50008035 | 2.90503148 | 3.37313341 | 3.91385745 | 31 |
| 32 | 2.57508276 | 3.00670759 | 3.50805875 | 4.08998104 | 32 |
| 33 | 2.65233524 | 3.11194235 | 3.64838110 | 4.27403018 | 33 |
| 34 | 2.73190530 | 3.22086033 | 3.79431634 | 4.46636154 | 34 |
| 35 | 2.81386245 | 3.33359045 | 3.94608899 | 4.66734781 | 35 |
| 36 | 2.89827833 | 3.45026611 | 4.10393255 | 4.87737846 | 36 |
| 37 | 2.98522668 | 3.57102543 | 4.26808986 | 5.09686049 | 37 |
| 38 | 3.07478348 | 3.69601132 | 4.43881345 | 5.32621921 | 38 |
| 39 | 3.16702698 | 3.82537171 | 4.61636599 | 5.56589908 | 39 |
| 40 | 3.26203779 | 3.95925972 | 4.80102063 | 5.81636454 | 40 |
| 41 | 3.35989893 | 4.09783381 | 4.99306145 | 6.07810094 | 41 |
| 42 | 3.46069589 | 4.24125799 | 5.19278391 | 6.35161548 | 42 |
| 43 | 3.56451677 | 4.38970202 | 5.40049527 | 6.63743818 | 43 |
| 44 | 3.67145227 | 4.54334160 | 5.61651508 | 6.93612290 | 44 |
| 45 | 3.78159584 | 4.70235855 | 5.84117568 | 7.24824843 | 45 |
| 46 | 3.89504372 | 4.86694110 | 6.07482271 | 7.57441961 | 46 |
| 47 | 4.01189503 | 5.03728404 | 6.31781562 | 7.91526849 | 47 |
| 48 | 4.13225188 | 5.21358898 | 6.57052824 | 8.27145557 | 48 |
| 49 | 4.25621944 | 5.39606459 | 6.83334937 | 8.64367107 | 49 |
| 50 | 4.38390602 | 5.58492686 | 7.10668335 | 9.03263627 | 50 |

## Amount of $I$ at Compound Interest

TABLE I.
$(1+i)^{n}$

| $n$ | $3 \%$ | $312 \%$ | 40 | $4^{1} 2^{\circ} \mathrm{C}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 4.51542320 | 5.78039930 | 7.39095068 | 9.43910490 | 51 |
| 52 | 4.65088590 | 5.98271327 | 7.68658871 | 9.86386463 | 52 |
| 53 | 4.79041247 | 6.19210824 | 7.99405226 | 10.30773853 | 53 |
| 54 | 4.93412485 | 6.40883202 | 8.31381435 | 10.77158677 | 54 |
| 55 | 5.08214859 | 6.63314114 | 8.64636692 | 11.25630817 | 55 |
| 56 | 5.23461305 | 6.86530108 | 8.99222160 | 11.76284204 | 56 |
| 57 | 5.39165144 | 7.10558662 | 9.35191046 | 12.29216993 | 57 |
| 58 | 5.55340098 | 7.35428215 | 9.72598688 | 12.84531758 | 58 |
| 59 | 5.72000301 | 7.61168203 | 10.11502635 | 13.42335687 | 59 |
| 60 | 5.89160310 | 7.87809090 | 10.51962741 | 14.02740793 | 60 |
| 61 | 6.06835120 | 8.15382408 | 10.94041250 | 14.65864129 | 61 |
| 62 | 6.25040173 | 8.43920793 | 11.37802900 | 15.31828014 | 62 |
| 63 | 6.43791379 | 8.73458020 | 11.83315016 | 16.00760275 | 63 |
| 64 | 6.63105120 | 9.04029051 | 12.30647617 | 16.72794487 | 64 |
| 65 | 6.82998273 | 9.35670068 | 12.79873522 | 17.48070239 | 65 |
| 66 | 7.03488222 | 9.68418520 | 13.31068463 | 18.26733400 | 66 |
| 67 | 7.24592868 | 10.02313168 | 13.84311201 | 19.08936403 | 67 |
| 68 | 7.46330654 | 10.37394129 | 14.39683649 | 19.94838541 | 68 |
| 69 | 7.68720574 | 10.73702924 | 14.97270995 | 20.84606276 | 69 |
| 70 | 7.91782191 | 11.11282526 | 15.57161835 | 21.78413558 | 70 |
| 71 | 8.15535657 | 11.50177414 | 16.19448308 | 22.76442168 | 71 |
| 72 | 8.40001727 | 11.90433624 | 16.84226241 | 23.78882066 | 72 |
| 73 | 8.65201778 | 12.32098801 | 17.51595290 | 24.85931759 | 73 |
| 74 | 8.91157832 | 12.75222259 | 18.21659102 | 25.97798688 | 74 |
| 75 | 9.17892567 | 13.19855038 | 18.94525466 | 27.14699629 | 75 |
| 76 | 9.45429344 | 13.66049964 | 19.70306485 | 28.36861112 | 76 |
| 77 | 9.73792224 | 14.13861713 | 20.49118744 | 29.64519862 | 77 |
| 78 | 10.03005991 | 14.63346873 | 21.31083494 | 30.97923256 | 78 |
| 79 | 10.33096171 | 15.14564013 | 22.16326834 | 32.37329802 | 79 |
| 80 | 10.64089056 | 15.67573754 | 23.04979907 | 33.83009643 | 80 |
| 81 | 10.96011727 | 16.22438835 | 23.97179103 | 35.35245077 | 81 |
| 82 | 11.28892079 | 16.79224195 | 24.93066267 | 36.94331106 | 82 |
| 83 | 11.62758842 | 17.37997041 | 25.92788918 | 38.60576006 | 83 |
| 84 | 11.97641607 | 17.98826938 | 26.96500475 | 40.34301926 | 84 |
| 85 | 12.33570855 | 18.61785881 | 28.04360494 | 42.15845513 | 85 |
| 86 | 12.70577981 | 19.26948387 | 29.16534914 | 44.05558561 | 86 |
| 87 | 13.08695320 | 19.94391580 | 30.33196310 | 46.03808696 | 87 |
| 88 | 13.47956180 | 20.64195285 | 31.54524163 | 48.10980087 | 88 |
| 89 | 13.88394865 | 21.36442120 | 32.80705129 | 50.27474191 | 89 |
| 90 | 14.30046711 | 22.11217595 | 34.11933334 | 52.53710530 | 90 |
| 91 | 14.72948112 | 22.88610210 | 35.48410668 | 54.90127503 | 91 |
| 92 | 15.17136556 | 23.68711568 | 36.90347094 | 57.37183241 | 92 |
| 93 | 15.62650652 | 24.51616473 | 38.37960978 | 59.95356487 | 93 |
| 94 | 16.09530172 | 25.37423049 | 39.91479417 | 62.65147529 | 94 |
| 95 | 16.57816077 | 26.26232856 | 41.51138594 | 65.47079168 | 95 |
| 96 | 17.07550559 | 27.18151006 | 43.17184138 | 68.41697730 | 96 |
| 97 | 17.58777076 | 28.13286291 | 44.89871503 | 71.49574128 | 97 |
| 98 | 18.11540388 | 29.11751311 | 46.69466363 | 74.71304964 | 98 |
| 99 | 18.65886600 | 30.13662607 | 48.56245018 | 78.07513687 | 99 |
| 100 | 19.21863198 | 31.19140798 | 50.50494818 | 81.58851803 | 100 |

Amount of 1 at Compound Interest
TABLE I.

$$
(1+\boldsymbol{i})^{n}
$$

| $n$ | 5 | $5 \%$ | $6^{\circ} \mathrm{c}$ | 7\% | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.05000000 | 1.05500000 | 1.06000000 | 1.07000000 | 1 |
| 2 | 1.10250000 | 1.11302500 | 1.12360000 | 1.14490000 | 2 |
| 3 | 1.15762500 | 1.17424138 | 1.19101600 | 1.22504300 | 3 |
| 4 | 1.21550625 | 1.23882465 | 1.26247696 | 1.31079601 | 4 |
| 5 | 1.27628156 | 1.30696001 | 1.33822558 | 1.40255173 | 5 |
| 6 | 1.34009564 | 1.37884281 | 1.41851911 | 1.50073035 | 6 |
| 7 | 1.40710042 | 1.45467916 | 1.50363026 | 1.60578148 | 7 |
| 8 | 1.47745544 | 1.53468651 | 1.59384807 | 1.71818618 | 8 |
| 9 | 1.55132822 | 1.61909427 | 1.68947896 | 1.83845921 | 9 |
| 10 | 1.62889463 | 1.70814446 | 1.79084770 | 1.96715136 | 10 |
| 11 | 1.71033936 | 1.80209240 | 1.89829856 | 2.10485195 | 11 |
| 12 | 1.79585633 | 1.90120749 | 2.01219647 | 2.25219159 | 12 |
| 13 | 1.88564914 | 2.00577390 | 2.13292826 | 2.40984500 | 13 |
| 14 | 1.97993160 | 2.11609146 | 2.26090396 | 2.57853415 | 14 |
| 15 | 2.07892818 | 2.23247649 | 2.39655819 | 2.75903154 | 15 |
| 16 | 2.18287459 | 2.35526270 | 2.54035168 | 2.95216375 | 16 |
| 17 | 2.29201832 | 2.48480215 | 2.69277279 | 3.15881521 | 17 |
| 18 | 2.40661923 | 2.62146627 | 2.85433915 | 3.37993228 | 18 |
| 19 | 2.52695020 | 2.76564691 | 3.02559950 | 3.61652754 | 19 |
| 20 | 2.65329771 | 2.91775749 | 3.20713547 | 3.86968446 | 20 |
| 21 | 2.78596259 | 3.07823415 | 3.39956360 | 4.14056237 | 21 |
| 22 | 2.92526072 | 3.24753703 | 3.60353742 | 4.43040174 | 22 |
| 23 | 3.07152376 | 3.42615157 | 3.81974966 | 4.74052986 | 22 |
| 24 | 3.22509994 | 3.61458990 | 4.04893464 | 5.07236695 | 24 |
| 25 | 3.38635494 | 3.81339235 | 4.29187072 | 5.42743264 | 25 |
| 26 | 3.55567269 | 4.02312893 | 4.54938296 | 5.80735292 | 26 |
| 27 | 3.73345632 | 4.24440102 | 4.82234594 | 6.21386763 | 27 |
| 28 | 3.92012914 | 4.47784307 | 5.11168670 | 6.64883836 | 28 |
| 29 | 4.11613560 | 4.72412444 | 5.41838790 | 7.11425705 | 29 |
| 30 | 4.32194238 | 4.98395129 | 5.74349117 | 7.61225504 | 30 |
| 31 | 4.53803949 | 5.25806861 | 6.08810064 | 8.14511290 | 31 |
| 32 | 4.76494147 | 5.54726238 | 6.45338668 | 8.71527080 | 32 |
| 33 | 5.00318854 | 5.85236181 | 6.84058988 | 9.32533975 | 33 |
| 34 | 5.25334797 | 6.17424171 | 7.25102528 | 9.97811354 | 34 |
| 35 | 5.51601537 | 6.51382501 | 7.68608679 | 10.67658148 | 35 |
| 36 | 5.79181614 | 6.87208538 | 8.14725200 | 11.42394219 | 36 |
| 37 | 6.08140694 | 7.25005008 | 8.63608712 | 12.22361814 | 37 |
| 38 | 6.38547729 | 7.64880283 | 9.15425235 | 13.07927141 | 38 |
| 39 | 6.70475115 | 8.06948699 | 9.70350749 | 13.99482041 | 39 |
| 40 | 7.03998871 | 8.51330877 | 10.28571794 | 14.97445784 | 40 |
| 41 | 7.39198815 | 8.98154076 | 10.90286101 | 16.02266989 | 41 |
| 42 | 7.76158756 | 9.47552550 | 11.55703267 | 17.14425678 | 42 |
| 43 | 8.14966693 | 9.99667940 | 12.25045463 | 18.34435475 | 43 |
| 44 | 8.55715028 | 10.54649677 | 12.98548191 | 19.62845959 | 44 |
| 45 | 8.98500779 | 11.12655409 | 13.76461083 | 21.00245176 | 45 |
| 46 | 9.43425818 | 11.73851456 | 14.59048748 | 22.47262338 | 46 |
| 47 | 9.90597109 | 12.38413287 | 15.46591673 | 24.04570702 | 47 |
| 48 | 10.40126965 | 13.06526017 | 16.39387173 | 25.72890651 | 48 |
| 49 | 10.92133313 | 13.78384948 | 17.37750403 | 27.52992997 | 49 |
| 50 | 11.46739979 | 14.54196120 | 18.42015427 | 29.45702506 | 50 |

TABLE 1.
$(1+i)^{n}$

| $n$ | 5 | $5{ }^{1}$ | $6 \%$ | $7 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 12.04076978 | 15.34176907 | 19.52536353 | 31.51901682 | 51 |
| 52 | 12.64280826 | 16.18556637 | 20.69688534 | 33.72534799 | 52 |
| 53 | 13.27494868 | 17.07577252 | 21.93869846 | 36.08612235 | 53 |
| 54 | 13.93869611 | 18.01494001 | 23.25502037 | 38.61215092 | 54 |
| 55 | 14.63563092 | 19.00576171 | 24.65032159 | 41.31500148 | 55 |
| 56 | 15.36741246 | 20.05107860 | 26.12934089 | 44.20705159 | 56 |
| 57 | 16.13578309 | 21.15388793 | 27.69710134 | 47.30154520 | 57 |
| 58 | 16.94257224 | 22.31735176 | 29.35892742 | 50.61265336 | 58 |
| 59 | 17.78970085 | 23.54480611 | 31.12046307 | 54.15553910 | 59 |
| 60 | 18.67918589 | 24.83977045 | 32.98769085 | 57.94642683 | 60 |
| 61 | 19.61314519 | 26.20595782 | 34.96695230 | 62.00267671 | 61 |
| 62 | 20.59380245 | 27.64728550 | 37.06496944 | 66.34286408 | 62 |
| 63 | 21.62349257 | 29.16788620 | 39.28886761 | 70.98686457 | 63 |
| 64 | 22.70466720 | 30.77211994 | 41.64619967 | 75.95594509 | 64 |
| 65 | 23.83990056 | 32.46458654 | 44.14497165 | 81.27286124 | 65 |
| 66 | 25.03189559 | 34.25013880 | 46.79366994 | 86.96196153 | 66 |
| 67 | 26.28349037 | 36.13389643 | 49.60129014 | 93.04929884 | 67 |
| 68 | 27.59766488 | 38.12126074 | 52.57736755 | 99.56274976 | 68 |
| 69 | 28.97754813 | 40.21793008 | 55.73200960 | 106.53214224 | 69 |
| 70 | 30.42642554 | 42.42991623 | 59.07593018 | 113.98939220 | 70 |
| 71 | 31.94774681 | 44.76356163 | 62.62048599 | 121.96864965 | 71 |
| 72 | 33.54513415 | 47.22555751 | 66.37771515 | 130.50645513 | 72 |
| 73 | 35.22239086 | 49.82296318 | 70.36037806 | 139.64190699 | 73 |
| 74 | 36.98351040 | 52.56322615 | 74.58200074 | 149.41684047 | 74 |
| 75 | 38.83268592 | 55.45420359 | 79.05692079 | 159.87601931 | 75 |
| 76 | 40.77432022 | 58.50418479 | 83.80033603 | 171.06734066 | 76 |
| 77 | 42.81303623 | 61.72191495 | 88.82835620 | 183.04205451 | 77 |
| 78 | 44.95368804 | 65.11662027 | 94.15805757 | 195.85499832 | 78 |
| 79 | 47.20137244 | 68.69803439 | 99.80754102 | 209.56484820 | 79 |
| 80 | 49.56144107 | 72.47642628 | 105.79599348 | 224.23438758 | 80 |
| 81 | 52.03951312 | 76.46262973 | 112.14375309 | 239.93079471 | 81 |
| 82 | 54.64148878 | 80.66807436 | 118.87237828 | 256.72595034 | 82 |
| 83 | 57.37356322 | 85.10481845 | 126.00472097 | 274.69676686 | 83 |
| 84 | 60.24224138 | 89.78558347 | 133.56500423 | 293.92554054 | 84 |
| 85 | 63.25435344 | 94.72379056 | 141.57890449 | 314.50032838 | 85 |
| 86 | 66.41707112 | 99.93359904 | 150.07363875 | 336.51535137 | 86 |
| 87 | 69.73792467 | 105.42994698 | 159.07805708 | 360.07142596 | 87 |
| 88 | 73.22482091 | 111.22859407 | 168.62274050 | 385.27642578 | 88 |
| 89 | 76.88606195 | 117.34616674 | 178.74010493 | 412.24577558 | 89 |
| 90 | 80.73036505 | 123.80020591 | 189.46451123 | 441.10297988 | 90 |
| 91 | 84.76688330 | 130.60921724 | 200.83238190 | 471.98018847 | 91 |
| 92 | 89.00522747 | 137.79272419 | 212.88232482 | 505.01880166 | 92 |
| 93 | 93.45548884 | 145.37132402 | 225.65526431 | 540.37011778 | 93 |
| 94 | 98.12826328 | 153.36674684 | 239.19458017 | 578.19602602 | 94 |
| 95 | 103.03467645 | 161.80191791 | 253.54625498 | 618.66974784 | 95 |
| 96 | 108.18641027 | 170.70102340 | 268.75903028 | 661.97663019 | 96 |
| 97 | 113.59573078 | 180.08957969 | 284.88457209 | 708.31499430 | 97 |
| 98 | 119.27551732 | 189.99450657 | 301.97764642 | 757.89704390 | 98 |
| 99 | 125.23929319 | 200.44420443 | 320.09630520 | 810.94983698 | 99 |
| 100 | 131.50125785 | 211.46863567 | 339.30208351 | 867.71632557 | 100 |

TABLE II.

$$
v^{n}=(1+i)^{-n}
$$

| n | $1 \%$ | $11 / 4$ | $11 / 2{ }_{0}$ | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.99009901 | 0.98765432 | 0.98522167 | 0.98280098 | 1 |
| 2 | 0.98029605 | 0.97546106 | 0.97066175 | 0.96589777 | 2 |
| 3 | 0.97059015 | 0.96341833 | 0.95631699 | 0.94928528 | 3 |
| 4 | 0.96098034 | 0.95152428 | 0.94218423 | 0.93295851 | 4 |
| 5 | 0.95146569 | 0.93977706 | 0.92826033 | 0.91691254 | 5 |
| $\delta$ | 0.94204524 | 0.92817488 | 0.91454219 | 0.90114254 | 6 |
| 7 | 0.93271805 | 0.91671593 | 0.90102679 | 0.88564378 | 7 |
| 8 | 0.92348322 | 0.90539845 | 0.88771112 | 0.87041157 | 8 |
| 9 | 0.91433982 | 0.89422069 | 0.87459224 | 0.85544135 | 9 |
| 10 | 0.90528695 | 0.88318093 | 0.86166723 | 0.84072860 | 10 |
| 11 | 0.89632372 | 0.87227746 | 0.84893323 | 0.82626889 | 11 |
| 12 | 0.88744923 | 0.86150860 | 0.83638742 | 0.81205788 | 12 |
| 13 | 0.87866260 | 0.85087269 | 0.82402702 | 0.79809128 | 13 |
| 14 | 0.86996297 | 0.84036809 | 0.81184928 | 0.78436490 | 14 |
| 15 | 0.86134947 | 0.82999318 | 0.79985150 | 0.77087459 | 15 |
| 16 | 0.85282126 | 0.81974635 | 0.78803104 | 0.75761631 | 16 |
| 17 | 0.84437749 | 0.80962602 | 0.77638526 | 0.74458605 | 17 |
| 18 | 0.83601731 | 0.79963064 | 0.76491159 | 0.73177990 | 18 |
| 19 | 0.82773992 | 0.78975866 | 0.75360747 | 0.71919401 | 19 |
| 20 | 0.81954447 | 0.78000855 | 0.74247042 | 0.70682458 | 20 |
| 21 | 0.81143017 | 0.77037881 | 0.73149795 | 0.69466789 | 21 |
| 22 | 0.80339621 | 0.76086796 | 0.72068763 | 0.68272028 | 22 |
| 23 | 0.79544179 | 0.75147453 | 0.71003708 | 0.67097817 | 23 |
| 24 | 0.78756613 | 0.74219707 | 0.69954392 | 0.65943800 | 24 |
| 25 | 0.77976844 | 0.73303414 | 0.68920583 | 0.64809632 | 25 |
| 26 | 0.77204796 | 0.72398434 | 0.67902052 | 0.63694970 | 26 |
| 27 | 0.76440392 | 0.71504626 | 0.66898574 | 0.62599479 | 27 |
| 28 | 0.75683557 | 0.70621853 | 0.65909925 | 0.61522829 | 28 |
| 29 | 0.74934215 | 0.69749978 | 0.64935887 | 0.60464697 | 29 |
| 30 | 0.74192292 | 0.68888867 | 0.63976243 | 0.59424764 | 30 |
| 31 | 0.73457715 | 0.68038387 | 0.63030781 | 0.58402716 | 31 |
| 32 | 0.72730411 | 0.67198407 | 0.62099292 | 0.57398247 | 32 |
| 33 | 0.72010307 | 0.66368797 | 0.61181568 | 0.56411053 | 33 |
| 34 | 0.71297334 | 0.65549429 | 0.60277407 | 0.55440839 | 34 |
| 35 | 0.70591420 | 0.64740177 | 0.59386608 | 0.54487311 | 35 |
| 36 | 0.69892495 | 0.63940916 | 0.58508974 | 0.53550183 | 36 |
| 37 | 0.69200490 | 0.63151522 | 0.57644309 | 0.52629172 | 37 |
| 38 | 0.68515337 | 0.62371873 | 0.56792423 | 0.51724002 | 38 |
| 39 | 0.67836967 | 0.61601850 | 0.55953126 | 0.50834400 | 39 |
| 40 | 0.67165314 | 0.60841334 | 0.55126232 | 0.49960098 | 40 |
| 41 | 0.66500311 | 0.60090206 | 0.54311559 | 0.49100834 | 41 |
| 42 | 0.65841892 | 0.59348352 | 0.53508925 | 0.48256348 | 42 |
| 43 | 0.65189992 | 0.58615656 | 0.52718153 | 0.47426386 | 43 |
| 44 | 0.64544546 | 0.57892006 | 0.51939067 | 0.46610699 | 44 |
| 45 | 0.63905492 | 0.57177290 | 0.51171494 | 0.45809040 | 45 |
| 46 | 0.63272764 | 0.56471397 | 0.50415265 | 0.45021170 | 46 |
| 47 | 0.62646301 | 0.55774219 | 0.49670212 | 0.44246850 | 47 |
| 48 | 0.62026041 | 0.55085649 | 0.48936170 | 0.43485848 | 48 |
| 49 | 0.61411921 | 0.54405579 | 0.48212975 | 0.42737934 | 49 |
| 50 | 0.60803882 | 0.53733905 | 0.47500468 | 0.42002883 | 50 |

Present Value of 1 at Compound Interest
TABLE II.

$$
v^{n}=(1+i)^{-n}
$$

| n | $1 \%$ | $11 / 4 c_{c}$ | $11 / 2 C_{C}$ | $13.4 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.60201864 | 0.53070524 | 0.46798491 | 0.41280475 | 51 |
| 52 | 0.59605806 | 0.52415332 | 0.46106887 | 0.40570492 | 52 |
| 53 | 0.59015649 | 0.51768229 | 0.45425505 | 0.39872719 | 53 |
| 54 | 0.58431336 | 0.51129115 | 0.44754192 | 0.39186947 | 54 |
| 55 | 0.57852808 | 0.50497892 | 0.44092800 | 0.38512970 | 55 |
| 56 | 0.57280008 | 0.49874461 | 0.43441182 | 0.37850585 | 56 |
| 57 | 0.56712879 | 0.49258727 | 0.42799194 | 0.37199592 | 57 |
| 58 | 0.56151365 | 0.48650594 | 0.42166694 | 0.36559796 | 58 |
| 59 | 0.55595411 | 0.48049970 | 0.41543541 | 0.35931003 | 59 |
| 60 | 0.55044962 | 0.47456760 | 0.40929597 | 0.35313025 | 60 |
| 61 | 0.54499962 | 0.46870874 | 0.40324726 | 0.34705676 | 61 |
| 62 | 0.53960358 | 0.46292222 | 0.39728794 | 0.34108772 | 62 |
| 63 | 0.53426097 | 0.45720713 | 0.39141669 | 0.33522135 | 63 |
| 64 | 0.52897126 | 0.45156259 | 0.38563221 | 0.32945587 | 64 |
| 65 | 0.52373392 | 0.44598775 | 0.37993321 | 0.32378956 | 65 |
| 66 | 0.51854844 | 0.44048173 | 0.37431843 | 0.31822069 | 66 |
| 67 | 0.51341429 | 0.43504368 | 0.36878663 | 0.31274761 | 67 |
| 68 | 0.50833099 | 0.42967277 | 0.36333658 | 0.30736866 | 68 |
| 69 | 0.50329801 | 0.42436817 | 0.35796708 | 0.30208222 | 69 |
| 70 | 0.49831486 | 0.41912905 | 0.35267692 | 0.29688670 | 70 |
| 71 | 0.49338105 | 0.41395462 | 0.34746495 | 0.29178054 | 71 |
| 72 | 0.48849609 | 0.40884407 | 0.34233000 | 0.28676221 | 72 |
| 73 | 0.48365949 | 0.40379661 | 0.33727093 | 0.28183018 | 73 |
| 74 | 0.47887078 | 0.39881147 | 0.33228663 | 0.27698298 | 74 |
| 75 | 0.47412949 | 0.39388787 | 0.32737599 | 0.27221914 | 75 |
| 76 | 0.46943514 | 0.38902506 | 0.32253793 | 0.26753724 | 76 |
| 77 | 0.46478726 | 0.38422228 | 0.31777136 | 0.26293586 | 77 |
| 78 | 0.46018541 | 0.37947879 | 0.31307523 | 0.25841362 | 78 |
| 79 | 0.45562912 | 0.37479387 | 0.30844850 | 0.25396916 | 79 |
| 80 | 0.45111794 | 0.37016679 | 0.30389015 | 0.24960114 | 80 |
| 81 | 0.44665142 | 0.36559683 | 0.29939916 | 0.24530825 | 81 |
| 82 | 0.44222913 | 0.36108329 | 0.29497454 | 0.24108919 | 82 |
| 83 | 0.43785063 | 0.35662547 | 0.29061531 | 0.23694269 | 83 |
| 84 | 0.43351547 | 0.35222268 | 0.28632050 | 0.23286751 | 84 |
| 85 | 0.42922324 | 0.34787426 | 0.28208917 | 0.22886242 | 85 |
| 86 | 0.42497350 | 0.34357951 | 0.27792036 | 0.22492621 | 86 |
| 87 | 0.42076585 | 0.33933779 | 0.27381316 | 0.22105770 | 87 |
| 88 | 0.41659985 | 0.33514843 | 0.26976666 | 0.21725572 | 88 |
| 89 | 0.41247510 | 0.33101080 | 0.26577997 | 0.21351914 | 89 |
| 90 | 0.40839119 | 0.32692425 | 0.26185218 | 0.20984682 | 90 |
| 91 | 0.40434771 | 0.32288814 | 0.25798245 | 0.20623766 | 91 |
| 92 | 0.40034427 | 0.31890187 | 0.25416990 | 0.20269057 | 92 |
| 93 | 0.39638046 | 0.31496481 | 0.25041369 | 0.19920450 | 93 |
| 94 | 0.39245590 | 0.31107636 | 0.24671300 | 0.19577837 | 94 |
| 95 | 0.38857020 | 0.30723591 | 0.24306699 | 0.19241118 | 95 |
| 96 | 0.38472297 | 0.30344287 | 0.23947487 | 0.18910190 | 96 |
| 97 | 0.38091383 | 0.29969666 | 0.23593583 | 0.18584953 | 97 |
| 98 | 0.37714241 | 0.29599670 | 0.23244909 | 0.18265310 | 98 |
| 99 | 0.37340832 | 0.29234242 | 0.22901389 | 0.17951165 | 99 |
| 100 | 0.36971121 | 0.28873326 | 0.22562944 | 0.17642422 | 100 |

## Present Value of 1 at Compound Interest

TABLE II. - $\quad \boldsymbol{r}^{\boldsymbol{n}}=(1+i)^{-n}$

| $n$ | $2 C 7$ | $21 / c^{4}$ | $21 / \%$ | $23.6 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.98039216 | 0.97799511 | 0.97560976 | 0.97323601 | 1 |
| 2 | 0.96116878 | 0.95647444 | 0.95181440 | 0.94718833 | 2 |
| 3 | 0.94232233 | 0.93542732 | 0.92859941 | 0.92183779 | 3 |
| 4 | 0.92384543 | 0.91484335 | 0.90595064 | 0.89716573 | 4 |
| 5 | 0.90573081 | 0.89471232 | 0.88385429 | 0.87315400 | 5 |
|  |  |  |  | , |  |
| 6 | 0.88797138 | 0.87502427 | 0.86229687 | 0.84978491 | 6 |
| 7 | 0.87056018 | 0.85576946 | 0.84126524 | 0.82704128 | 7 |
| 8 | 0.85349037 | 0.83693835 | 0.82074657 | 0.80490635 | 8 |
| 9 | 0.83675527 | 0.81852161 | 0.80072836 | 0.78336385 | 9 |
| 10 | 0.82034830 | 0.80051013 | 0.78119840 | 0.76239791 | 10 |
| 11 | 0.80426304 | 0.78289499 | 0.76214478 | 0.74199310 | 11 |
| 12 | 0.78849318 | 0.76566748 | 0.74355589 | 0.72213440 | 12 |
| 13 | 0.77303253 | 0.74881905 | 0.72542038 | 0.70280720 | 13 |
| 14 | 0.75787502 | 0.73234137 | 0.70772720 | 0.68399728 | 14 |
| 15 | 0.74301473 | 0.71622628 | 0.69046556 | 0.66569078 | 15 |
| 16 | 0.72844581 | 0.70046580 | 0.67362493 | 0.64787424 | 16 |
| 17 | 0.71416256 | 0.68505212 | 0.65719506 | 0.63053454 | 17 |
| 18 | 0.70015937 | 0.66997763 | 0.64116591 | 0.61365892 | 18 |
| 19 | 0.68643076 | 0.65523484 | 0.62552772 | 0.59723496 | 19 |
| 20 | 0.67297133 | 0.64081647 | 0.61027094 | 0.58125057 | 20 |
| 21 | 0.65977582 | 0.62671538 | 0.59538629 | 0.56569398 | 21 |
| 22 | 0.64683904 | 0.61292457 | 0.58086467 | 0.55055375 | 22 |
| 23 | 0.63415592 | 0.59943724 | 0.56669724 | 0.53581874 | 23 |
| 24 | 0.62172149 | 0.58624668 | 0.55287535 | 0.52147809 | 24 |
| 25 | 0.60953087 | 0.57334639 | 0.53939059 | 0.50752126 | 25 |
| 26 | 0.59757928 | 0.56072997 | 0.52623472 | 0.49393796 | 26 |
| 27 | 0.58586204 | 0.54839117 | 0.51339973 | 0.48071821 | 27 |
| 28 | 0.57437455 | 0.53632388 | 0.50087778 | 0.46785227 | 28 |
| 29 | 0.56311231 | 0.52452213 | 0.48866125 | 0.45533068 | 29 |
| 30 | 0.55207089 | 0.51298008 | 0.47674269 | 0.44314421 | 30 |
| 31 | 0.54124597 | 0.50169201 | 0.46511481 | 0.43128391 | 31 |
| 32 | 0.53063330 | 0.49065233 | 0.45377055 | 0.41974103 | 32 |
| 33 | 0.52022873 | 0.47985558 | 0.44270298 | 0.40850708 | 33 |
| 34 | 0.51002817 | 0.46929641 | 0.43190534 | 0.39757380 | 34 |
| 35 | 0.50002761 | 0.45896960 | 0.42137107 | 0.38693314 | 35 |
| 36 | 0.49022315 | 0.44887002 | 0.41109372 | 0.37657727 | 36 |
| 37 | 0.48061093 | 0.43899268 | 0.40106705 | 0.36649856 | 37 |
| 38 | 0.47118719 | 0.42933270 | 0.39128492 | 0.35668959 | 38 |
| 39 | 0.46194822 | 0.41988528 | 0.38174139 | 0.34714316 | 39 |
| 40 | 0.45289042 | 0.41064575 | 0.37243062 | 0.33785222 | 40 |
| 41 | $0.4440 \quad 1021$ | 0.40160954 | 0.36334695 | 0.32880995 | 41 |
| 42 | 0.43530413 | 0.39277216 | 0.35448483 | 0.32000968 | 42 |
| 43 | 0.42676875 | 0.38412925 | 0.34583886 | 0.31144495 | 43 |
| 44 | 0.41840074 | 0.37567653 | 0.33740376 | 0.30310944 | 44 |
| 45 | 0.41019680 | 0.36740981 | 0.32917440 | 0.29499702 | 45 |
| 46 | 0.40215373 | 0.35932500 | 0.32114576 | 0.28710172 | 46 |
| 47 | 0.39426836 | 0.35141809 | 0.31331294 | 0.27941773 | 47 |
| 48 | 0.38653761 | 0.34368518 | 0.30567116 | 0.27193940 | 48 |
| 49 | 0.37895844 | 0.33612242 | 0.29821576 | 0.26466122 | 49 |
| 50 | 0.37152788 | 0.32872608 | 0.29094221 | 0.25757783 | 50 |

Present Value of 1 at Compound Interest
TABLE II.

$$
v^{n}=(1+i)^{-n}
$$

| n | $2{ }_{C}$ | $2 \%$ | 2\% $\%$ | $23 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.36424302 | 0.32149250 | 0.28384606 | 0.25068402 | 51 |
| 52 | 0.35710100 | 0.31441810 | 0.27692298 | 0.24397471 | 52 |
| 53 | 0.35009902 | 0.30749936 | 0.27016876 | 0.23744497 | 53 |
| 54 | 0.3432 .3433 | 0.30073287 | 0.26357928 | 0.23109000 | 54 |
| 55 | 0.33650425 | 0.29411528 | 0.25715052 | 0.22490511 | 55 |
| 56 | 0.32990613 | 0.28764330 | 0.25087855 | 0.21888575 | 56 |
| 57 | 0.32343738 | 0.28131374 | 0.24475956 | 0.21302749 | 57 |
| 58 | 0.31709547 | 0.27512347 | 0.23878982 | 0.20732603 | 58 |
| 59 | 0.31087791 | 0.26906940 | 0.23296568 | 0.20177716 | 59 |
| 60 | 0.30478227 | 0.26314856 | 0.22728359 | 0.19637679 | 60 |
| 61 | 0.29880614 | 0.25735801 | 0.22174009 | 0.19112097 | 61 |
| 62 | 0.29294720 | 0.25169487 | 0.21633179 | 0.18600581 | 62 |
| 63 | 0.28720314 | 0.24615635 | 0.21105541 | 0.18102755 | 63 |
| 64 | 0.28157170 | 0.24073971 | 0.20590771 | 0.17618253 | 64 |
| 65 | 0.27605069 | 0.23544226 | 0.20088557 | 0.1714 .6718 | 65 |
| 66 | 0.27063793 | 0.23026138 | 0.19598593 | 0.16687804 | 66 |
| 67 | 0.26533130 | 0.22519450 | 0.19120578 | 0.16241172 | 67 |
| 68 | 0.26012873 | 0.22023912 | 0.18654223 | 0.15806493 | 68 |
| 69 | 0.25502817 | 0.21539278 | 0.18199241 | 0.15383448 | 69 |
| 70 | 0.25002761 | 0.21065309 | 0.17755358 | 0.14971726 | 70 |
| 71 | 0.24512511 | 0.20601769 | 0.17322300 | 0.14571023 | 71 |
| 72 | 0.24031874 | 0.20148429 | 0.16899805 | 0.14181044 | 72 |
| 73 | 0.23560661 | 0.19705065 | 0.16487615 | 0.13801503 | 73 |
| 74 | 0.23098687 | 0.19271458 | 0.16085478 | 0.13432119 | 74 |
| 75 | 0.22645771 | 0.18847391 | 0.15693149 | 0.13072622 | 75 |
| 76 | 0.22201737 | 0.18432657 | 0.15310389 | 0.12722747 | 76 |
| 77 | 0.21766408 | 0.18027048 | 0.14936965 | 0.12382235 | 77 |
| 78 | 0.21339616 | 0.17630365 | 0.14572649 | 0.12050837 | 78 |
| 79 | 0.20921192 | 0.17242411 | 0.14217218 | 0.11728309 | 79 |
| 80 | 0.20510973 | 0.16862993 | 0.13870457 | 0.11414412 | 80 |
| 81 | 0.20108797 | 0.16491925 | 0.13532153 | 0.11108917 | 81 |
| 82 | 0.19714507 | 0.16129022 | 0.13202101 | 0.10811598 | 82 |
| 83 | 0.19327948 | 0.15774105 | 0.12880098 | 0.10522237 | 83 |
| 84 | 0.18948968 | 0.15426997 | 0.12565949 | 0.10240620 | 84 |
| 85 | 0.18577420 | 0.15087528 | 0.12259463 | 0.09966540 | 85 |
| 86 | 0.18213157 | 0.14755528 | 0.11960452 | 0.09699795 | 86 |
| 87 | 0.17856036 | 0.14430835 | 0.11668733 | 0.09440190 | 87 |
| 88 | 0.17505918 | 0.14113286 | 0.11384130 | 0.09187533 | 88 |
| 89 | 0.17162665 | 0.13802724 | 0.11106468 | 0.08941638 | 89 |
| 90 | 0.16826142 | 0.13498997 | 0.10835579 | 0.08702324 | 90 |
| 91 | 0.16496217 | 0.13201953 | 0.10571296 | 0.08469415 | 91 |
| 92 | 0.16172762 | 0.12911445 | 0.10313460 | 0.08242740 | 92 |
| 93 | 0.15855649 | 0.12627331 | 0.10061912 | 0.08022131 | 93 |
| 94 | 0.15544754 | 0.12349468 | 0.09816500 | 0.07807427 | 94 |
| 95 | 0.15239955 | 0.12077719 | 0.09577073 | 0.07598469 | 95 |
| 96 | 0.14941132 | 0.11811950 | 0.09343486 | 0.07395104 | 96 |
| 97 | 0.14648169 | 0.11552029 | 0.09115596 | 0.07197181 | 97 |
| 98 | 0.14360950 | 0.11297828 | 0.08893264 | 0.07004556 | 98 |
| 99 | 0.14079363 | 0.11049221 | 0.08676355 | 0.06817086 | 99 |
| 100 | 0.13803297 | 0.10806084 | 0.08464737 | 0.06634634 | 100 |

Present-Value of 1 at Compound Interest
TABLE II.
$v^{n}=(1+i)^{-n}$

| $n$ | $3 \%$ | $3 \frac{1}{2} \%$ | $4 \%$ | 4\% $2 \%$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.97087379 | 0.96618357 | 0.96153846 | 0.95693780 | 1 |
| 2 | 0.94259591 | 0.93351070 | 0.92455621 | 0.91572995 | 2 |
| 3 | 0.91514166 | 0.90194271 | 0.88899636 | 0.87629660 | 3 |
| 4 | 0.88848705 | 0.87144223 | 0.85480419 | 0.83856134 | 4 |
| 5 | 0.86260878 | 0.84197317 | 0.82192711 | 0.80245105 | 5 |
| 6 | 0.83748426 | 0.81350064 | 0.79031453 | 0.76789574 | 6 |
| 7 | 0.81309151 | 0.78599096 | 0.75991781 | 0.73482846 | 7 |
| 8 | 0.78940923 | 0.75941156 | 0.73069021 | 0.70318513 | 8 |
| 9 | 0.76641673. | 0.73373097 | 0.70258674 | 0.67290443 | 9 |
| 10 | 0.74409391 | 0.70891881 | 0.67556417 | 0.64392768 | 10 |
| 11 | 0.72242128 | 0.68494571 | 0.64958093 | 0.61619874 | 11 |
| 12 | 0.70137988 | 0.66178330 | 0.62459705 | 0.58966386 | 12 |
| 13 | 0.68095134 | 0.63940415 | 0.60057409 | 0.56427164 | 13 |
| 14 | 0.66111781 | 0.61778179 | 0.57747508 | 0.53997286 | 14 |
| 15 | 0.64186195 | 0.59689062 | 0.55526450 | 0.51672044 | 15 |
| 16 | 0.62316694 | 0.57670591 | 0.53390818 | 0.49446932 | 16 |
| 17 | 0.60501645 | 0.55720378 | 0.51337325 | 0.47317639 | 17 |
| 18 | 0.58739461 | 0.53836114 | 0.49362812 | 0.45280037 | 18 |
| 19 | 0.57028603 | 0.52015569 | 0.47464242 | 0.43330179 | 19 |
| 20 | 0.55367575 | 0.50256588 | 0.45638695 | 0.41464286 | 20 |
| 21 | 0.53754928 | 0.48557090 | 0.43883360 | 0.39678743 | 21 |
| 22 | 0.52189250 | 0.46915063 | 0.42195539 | 0.37970089 | 22 |
| 23 | 0.50669175 | 0.45328563 | 0.40572633 | 0.36335013 | 23 |
| 24 | 0.49193374 | 0.43795713 | 0.39012147 | 0.34770347 | 24 |
| 25 | 0.47760557 | 0.42314699 | 0.37511680 | 0.33273060 | 25 |
| 26 | 0.46369473 | 0.40883767 | 0.36068923 | 0.31840248 | 26 |
| 27 | 0.45018906 | 0.39501224 | 0.34681657 | 0.30469137 | 27 |
| 28 | 0.43707675 | 0.38165434 | 0.33347747 | 0.29157069 | 28 |
| 29 | 0.42434636 | 0.36874815 | 0.32065141 | 0.27901502 | 29 |
| 30 | 0.41198676 | 0.35627841 | 0.30831867 | 0.26700002 | 30 |
| 31 | 0.39998715 | 0.34423035 | 0.29646026 | 0.25550241 | 31 |
| 32 | 0.38833703 | 0.33258971 | 0.28505794 | 0.24449991 | 32 |
| 33 | 0.37702625 | 0.32134271 | 0.27409417 | 0.23397121 | 33 |
| 34 | 0.36604490 | 0.31047605 | 0.26355209 | 0.22389589 | 34 |
| 35 | 0.35538340 | 0.29997686 | 0.25341547 | 0.21425444 | 35 |
| 36 | 0.34503243 | 0.28983272 | 0.24366872 | 0.20502817 | 36 |
| 37 | 0.33498294 | 0.28003161 | 0.23429685 | 0.19619921 | 37 |
| 38 | 0.32522615 | 0.27056194 | 0.22528543 | 0.18775044 | 38 |
| 39 | 0.31575355 | 0.26141250 | 0.21662061 | 0.17966549 | 39 |
| 40 | 0.30655684 | 0.25257247 | 0.20828904 | 0.17192870 | 40 |
| 41 | 0.29762800 | 0.24403137 | 0.20027793 | 0.16452507 | 41 |
| 42 | 0.28895922 | 0.23577910 | 0.19257493 | 0.15744026 | 42 |
| 43 | 0.28054294 | 0.22780590 | 0.18516820 | 0.15066054 | 43 |
| 44 | 0.27237178 | 0.22010231 | 0.17804635 | 0.14417276 | 44 |
| 45 | 0.26443862 | 0.21265924 | 0.17119841 | 0.13796437 | 45 |
| 46 | 0.25673653 | 0.20546787 | 0.16461386 | 0.13202332 | 46 |
| 47 | 0.24925876 | 0.19851968 | 0.15828256 | 0.12633810 | 47 |
| 48 | 0.24199880 | 0.19180645 | 0.15219476 | 0.12089771 | 48 |
| 49 | 0.23495029 | 0.18532024 | 0.14634112 | 0.11569158 | 49 |
| 50 | 0.22810708 | 0.17905337 | 0.14071262 | 0.11070965 | 50 |

Present Value of 1 at Compound Interest

TABLE II.

$$
v^{n}=(1+i)^{-n}
$$

| $n$ | $3 \%$ | $31 / \%$ | $4 \%$ | 4\%\% | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.22146318 | 0.17299843 | 0.13530059 | 0.10594225 | 51 |
| 52 | 0.21501280 | 0.16714824 | 0.13009672 | 0.10138014 | 52 |
| 53 | 0.20875029 | 0.16149589 | 0.12509300 | 0.09701449 | 53 |
| 54 | 0.20267019 | 0.15603467 | 0.12028173 | 0.09283683 | 54 |
| 55 | 0.19676717 | 0.15075814 | 0.11565551 | 0.08883907 | 55 |
| 56 | 0.19103609 | 0.14566004 | 0.11120722 | 0.08501347 | 56 |
| 57 | 0.18547193 | 0.14073433 | 0.10693002 | 0.08135260 | 57 |
| 58 | 0.18006984 | 0.13597520 | 0.10281733 | 0.07784938 | 58 |
| 59 | 0.17482508 | 0.13137701 | 0.09886282 | 0.07449701 | 59 |
| 60 | 0.16973309 | 0.12693431 | 0.09506040 | 0.07128901 | 60 |
| 61 | 0.16478941 | 0.12264184 | 0.09140423 | 0.06821915 | 61 |
| 62 | 0.15998972 | 0.11849453 | 0.08788868 | 0.06528148 | 62 |
| 63 | 0.15532982 | 0.11448747 | 0.08450835 | 0.06247032 | 63 |
| 64 | 0.15080565 | 0.11061591 | 0.08125803 | 0.05978021 | 64 |
| 65 | 0.14641325 | 0.10687528 | 0.07813272 | 0.05720594 | 65 |
| 66 | 0.14214879 | 0.10326114 | 0.07512762 | 0.05474253 | 66 |
| 67 | 0.13800853 | 0.09976922 | 0.07223809 | 0.05238519 | 67 |
| 68 | 0.13398887 | 0.09639538 | 0.06945970 | 0.05012937 | 68 |
| 69 | 0.13008628 | 0.09313563 | 0.06678818 | 0.04797069 | 69 |
| 70 | 0.12629736 | 0.08998612 | 0.06421940 | 0.04590497 | 70 |
| 71 | 0.12261880 | 0.08694311 | 0.06174942 | 0.04392820 | 71 |
| 72 | 0.11904737 | 0.08400300 | 0.05937445 | 0.04203655 | 72 |
| 73 | 0.11557998 | 0.08116232 | 0.05709081 | 0.04022637 | 73 |
| 74 | 0.11221357 | 0.07841770 | 0.05489501 | 0.03849413 | 74 |
| 75 | 0.10894521 | 0.07576590 | 0.05278367 | 0.03683649 | 75 |
| 76 | 0.1057 7205 | 0.07320376 | 0.05075353 | 0.03525023 | 76 |
| 77 | 0.10269131 | 0.07072827 | 0.04880147 | 0.03373228 | 77 |
| 78 | 0.09970030 | 0.06833650 | 0.04692449 | 0.03227969 | 78 |
| 79 | 0.09679641 | 0.06602560 | 0.04511970 | 0.03088965 | 79 |
| 80 | 0.09397710 | 0.06379285 | 0.04338433 | 0.02955948 | 80 |
| 81 | 0.09123990 | 0.06163561 | 0.04171570 | 0.02828658 | 81 |
| 82 | 0.08858243 | 0.05955131 | 0.04011125 | 0.02706850 | 82 |
| 83 | 0.08600236 | 0.05753750 | 0.03856851 | 0.02590287 | 83 |
| 84 | 0.08349743 | 0.05559178 | 0.03708510 | 0.02478744 | 84 |
| 85 | 0.08106547 | 0.05371187 | 0.03565875 | 0.02372003 | 85 |
| 86 | 0.07870434 | 0.05189553 | 0.03428726 | 0.02269860 | 86 |
| 87 | 0.07641198 | 0.05014060 | 0.03296852 | 0.02172115 | 87 |
| 88 | 0.07418639 | 0.04844503 | 0.03170050 | 0.02078579 | 88 |
| 89 | 0.07202562 | 0.04680679 | 0.03048125 | 0.01989070 | 89 |
| 90 | 0.06992779 | 0.04522395 | 0.02930890 | 0.01903417 | 90 |
| 91 | 0.06789105 | 0.04369464 | 0.02818163 | 0.01821451 | 91 |
| 92 | 0.06591364 | 0.04221704 | 0.02709772 | 0.01743016 | 92 |
| 93 | 0.06399383 | 0.04078941 | 0.02605550 | 0.01667958 | 93 |
| 94 | 0.06212993 | 0.03941006 | 0.02505337 | 0.01596132 | 94 |
| 95 | 0.06032032 | 0.03807735 | 0.02408978 | 0.01527399 | 95 |
| 96 | 0.05856342 | 0.03678971 | 0.02316325 | 0.01461626 | 96 |
| 97 | 0.05685769 | 0.03554562 | 0.02227235 | 0.01398685 | 97 |
| 98 | 0.05520164 | 0.03434359 | 0.02141572 | 0.01338454 | 98 |
| 99 | 0.05359383 | 0.03318221 | 0.02059204 | 0.01280817 | 99 |
| 100 | 0.05203284 | 0.03206011 | 0.01980004 | 0.01225663 | 100 |

## Present Value of 1 at Compound Interest

TABLE II.
$-\quad r^{n}=(1+i)^{-n}$

| $n$ | $5 \%$ | $5 \%$ | 6\% | $7 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.95238095 | 0.94786730 | 0.94339623 | 0.93457944 | 1 |
| 2 | 0.90702948 | 0.89845242 | 0.88999644 | 0.87343873 | 2 |
| 3 | 0.86383760 | 0.85161366 | 0.83961928 | 0.81629788 | 3 |
| 4 | 0.82270247 | 0.80721674 | 0.79209366 | 0.76289521 | 4 |
| 5 | 0.78352617 | 0.76513435 | 0.74725817 | 0.71298618 | 5 |
| 6 | 0.74621540 | 0.72524583 | 0.70496054 | 0.66634222 | 6 |
| 7 | 0.71068133 | 0.68743681 | 0.66505711 | 0.62274974 | 7 |
| 8 | 0.67683936 | 0.65159887 | 0.62741237 | 0.58200910 | 8 |
| 9 | 0.64460892 | 0.61762926 | 0.59189846 | 0.54393374 | 9 |
| 10 | 0.61391325 | 0.58543058 | 0.55839478 | 0.50834929 | 10 |
| 11 | 0.58467929 | 0.55491050 | 0.52678753 | 0.47509280 | 11 |
| 12 | 0.55683742 | 0.52598152 | 0.49696936 | 0.44401196 | 12 |
| 13 | 0.53032135 | 0.49856068 | 0.46883902 | 0.41496445 | 13 |
| 14 | 0.50506795 | 0.47256937 | 0.44230096 | 0.38781724 | 14 |
| 15 | 0.48101710 | 0.44793305 | 0.41726506 | 0.36244602 | 15 |
| 16 | 0.45811152 | 0.42458109 | 0.39364628 | 0.33873460 | 16 |
| 17 | 0.43629669 | 0.40244653 | 0.37136442 | 0.31657439 | 17 |
| 18 | 0.41552065 | 0.38146590 | 0.35034379 | 0.29586392 | 18 |
| 19 | 0.39573396 | 0.36157906 | 0.33051301 | 0.27650832 | 19 |
| 20 | 0.37688948 | 0.34272896 | 0.31180473 | 0.25841900 | 20 |
| 21 | 0.35894236 | 0.32486158 | 0.29415540 | 0.24151309 | 21 |
| 22 | 0.34184987 | 0.30792567 | 0.27750510 | 0.22571317 | 22 |
| 23 | 0.32557131 | 0.29187267 | 0.26179726 | 0.21094688 | 23 |
| 24 | 0.31006791 | 0.27665656 | 0.24697855 | 0.19714662 | 24 |
| 25 | 0.29530277 | 0.26223370 | 0.23299863 | 0.18424918 | 25 |
| 26 | 0.28124073 | 0.24856275 | 0.21981003 | 0.17219549 | 26 |
| 27 | 0.26784832 | 0.23560450 | 0.20736795 | 0.16093037 | 27 |
| 28 | 0.25509364 | 0.22332181 | 0.19563014 | 0.15040221 | 28 |
| 29 | 0.24294632 | 0.21167944 | 0.18455674 | 0.14056282 | 29 |
| 30 | 0.23137745 | 0.20064402 | 0.17411013 | 0.13136712 | 30 |
| 31 | 0.22035947 | 0.19018390 | 0.16425484 | 0.12277301 | 31 |
| 32 | 0.20986617 | 0.18026910 | 0.15495740 | 0.11474113 | 32 |
| 33 | 0.19987254 | 0.17087119 | 0.14618622 | 0.10723470 | 33 |
| 34 | 0.19035480 | 0.16196321 | 0.13791153 | 0.10021934 | 34 |
| 35 | 0.18129029 | 0.15351963 | 0.13010522 | 0.09366294 | 35 |
| 36 | 0.17265741 | 0.14551624 | 0.12274077 | 0.08753546 | 36 |
| 37 | 0.16443563 | 0.13793008 | 0.11579318 | 0.08180884 | 37 |
| 38 | 0.15660536 | 0.13073941 | 0.10923885 | 0.07645686 | 38 |
| 39 | 0.14914797 | 0.12392362 | 0.10305552 | 0.07145501 | 39 |
| 40 | 0.14204568 | 0.11746314 | 0.09722219 | 0.06678038 | 40 |
| 41 | 0.13528160 | 0.11133947 | 0.09171905 | 0.06241157 | 41 |
| 42 | 0.12883962 | 0.10553504 | 0.08652740 | 0.05832857 | 42 |
| 43 | 0.12270440 | 0.10003322 | 0.08162962 | 0.05451268 | 43 |
| 44 | 0.11686133 | 0.09481822 | 0.07700908 | 0.05094643 | 44 |
| 45 | 0.11129651 | 0.08987509 | 0.07265007 | 0.04761349 | 45 |
| 46 | 0.10599668 | 0.08518965 | 0.06853781 | 0.04449859 | 46 |
| 47 | 0.10094921 | 0.08074849 | 0.06465831 | 0.04158747 | 47 |
| 48 | 0.09614211 | 0.07653885 | 0.06099840 | 0.03886679 | 48 |
| 49 | 0.09156391 | 0.07254867 | 0.05754566 | 0.03632410 | 49 |
| 50 | 0.08720373 | 0.06876652 | 0.05428836 | 0.03394776 | 50 |

Present Value of 1 at Compound Interest
TABLE II.

$$
v^{n}=(1+i)^{-n}
$$

| n | $5 \%$ | $5{ }^{1} 2$ | $6_{C}$ | $7 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.08305117 | 0.06518153 | 0.05121544 | 0.03172688 | 51 |
| 52 | 0.07909635 | 0.06178344 | 0.04831645 | 0.02965129 | 52 |
| 53 | 0.07532986 | 0.05856250 | 0.04558156 | 0.02771148 | 53 |
| 54 | 0.07174272 | 0.05550948 | 0.04300147 | 0.02589858 | 54 |
| 55 | 0.06832640 | 0.05261562 | 0.04056742 | 0.02420428 | 55 |
| 56 | 0.06507276 | 0.04987263 | 0.03827115 | 0.02262083 | 56 |
| 57 | 0.06197406 | 0.04727263 | 0.03610486 | 0.02114096 | 57 |
| 58 | 0.05902291 | 0.04480818 | 0.03406119 | 0.01975791 | 58 |
| 59 | 0.05621230 | 0.04247221 | 0.03213320 | 0.01846533 | 59 |
| 60 | 0.05353552 | 0.04025802 | 0.03031434 | 0.01725732 | 60 |
| 61 | 0.05098621 | 0.03815926 | 0.02859843 | 0.01612834 | 61 |
| 62 | 0.04855830 | 0.03616992 | 0.02697965 | 0.01507321 | 62 |
| 63 | 0.04624600 | 0.03428428 | 0.02545250 | 0.01408711 | 63 |
| 64 | 0.04404381 | 0.03249695 | 0.02401179 | 0.01316553 | 64 |
| 65 | 0.04194648 | 0.03080279 | 0.02265264 | 0.01230423 | 65 |
| 66 | 0.03994903 | 0.02919696 | 0.02137041 | 0.01149928 | 66 |
| 67 | 0.03804670 | 0.02767485 | 0.02016077 | 0.01074699 | 67 |
| 68 | 0.03623495 | 0.02623208 | 0.01901959 | 0.01004392 | 68 |
| 69 | 0.03450948 | 0.02486453 | 0.01794301 | 0.00938684 | 69 |
| 70 | 0.03286617 | 0.02356828 | 0.01692737 | 0.00877275 | 70 |
| 71 | 0.03130111 | 0.02233960 | 0.01596921 | 0.00819883 | 71 |
| 72 | 0.02981058 | 0.02117498 | 0.01506530 | 0.00766246 | 72 |
| 73 | 0.02839103 | 0.02007107 | 0.01421254 | 0.00716117 | 73 |
| 74 | 0.02703908 | 0.01902471 | 0.01340806 | 0.00669269 | 74 |
| 75 | 0.02575150 | 0.01803290 | 0.01264911 | 0.00625485 | 75 |
| 76 | 0.02452524 | 0.01709279 | 0.01193313 | 0.00584565 | 76 |
| 77 | 0.02335737 | 0.01620170 | 0.01125767 | 0.00546323 | 77 |
| 78 | 0.02224512 | 0.01535706 | 0.01062044 | 0.00510582 | 78 |
| 79 | 0.02118582 | 0.01455646 | 0.01001928 | 0.00477179 | 79 |
| 80 | 0.02017698 | 0.01379759 | 0.00945215 | 0.00445962 | 80 |
| 81 | 0.01921617 | 0.01307828 | 0.00891713 | 0.00416787 | 81 |
| 82 | 0.01830111 | 0.01239648 | 0.00841238 | 0.00389520 | 82 |
| 83 | 0.01742963 | 0.01175022 | 0.00793621 | 0.00364038 | 83 |
| 84 | 0.01659965 | 0.01113765 | 0.00748699 | 0.00340222 | 84 |
| 85 | 0.01580919 | 0.01055701 | 0.00706320 | 0.00317965 | 85 |
| 86 | 0.01505637 | 0.01000664 | 0.00666340 | 0.00297163 | 86 |
| 87 | 0.01433940 | 0.00948497 | 0.00628622 | 0.00277723 | 87 |
| 88 | 0.01365657 | 0.00899049 | 0.00593040 | 0.00259554 | 88 |
| 89 | 0.01300626 | 0.00852180 | 0.00559472 | 0.00242574 | 89 |
| 90 | 0.01238691 | 0.00807753 | 0.00527803 | 0.00226704 | 90 |
| 91 | 0.01179706 | 0.00765643 | 0.00497928 | 0.00211873 | 91 |
| 92 | 0.01123530 | 0.00725728 | 0.00469743 | 0.00198012 | 92 |
| 93 | 0.01070028 | 0.00687894 | 0.00443154 | 0.00185058 | 93 |
| 94 | 0.01019074 | 0.00652032 | 0.00418070 | 0.00172952 | 94 |
| 95 | 0.00970547 | 0.00618040 | 0.00394405 | 0.00161637 | 95 |
| 96 | 0.00924331 | 0.00585820 | 0.00372081 | 0.00151063 | 96 |
| 97 | 0.00880315 | 0.00555279 | 0.00351019 | 0.00141180 | 97 |
| 98 | 0.00838395 | 0.00526331 | 0.00331150 | 0.00131944 | 98 |
| 99 | 0.00798471 | 0.00498892 | 0.00312406 | 0.00123312 | 99 |
| 100 | 0.00760449 | 0.00472883 | 0.00294723 | 0.00115245 | 100 |

Amount of 1 per Annum at Compound Interest
TABLE III.

$$
-s_{\bar{n}}=\left[(1+i)^{n}-1\right] / i
$$

| $n$ | 1\% | $114 \%$ | $112{ }_{2}$ | 13.6 | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.00000000 | 1.00000000 | 1.00000000 | 1.00000000 | 1 |
| 2 | 2.01000000 | 2.01250000 | 2.01500000 | 2.01750000 | 2 |
| 3 | 3.03010000 | 3.03765625 | 3.04522500 | 3.05280625 | 3 |
| 4 | 4.06040100 | 4.07562695 | 4.09090338 | 4.10623036 | 4 |
| 5 | 5.10100501 | 5.12657229 | 5.15226693 | 5.17808939 | 5 |
| 6 | 6.15201506 | 6.19065444 | 6.22955093 | 6.26870596 | 6 |
| 7 | 7.21353521 | 7.26803762 | 7.32299419 | 7.37840831 | 7 |
| 8 | 8.28567056 | 8.35888809 | 8.43283911 | 8.50753045 | 8 |
| 9 | 9.36852727 | 9.46337420 | 9.55933169 | 9.65641224 | 9 |
| 10 | 10.46221254 | 10.58166637 | 10.70272167 | 10.82539945 | 10 |
| 11 | 11.56683467 | 11.71393720 | 11.86326249 | 12.01484394 | 11 |
| 12 | 12.68250301 | 12.86036142 | 13.04121143 | 13.22510371 | 12 |
| 13 | 13.80932804 | 14.02111594 | 14.23682960 | 14.45654303 | 13 |
| 14 | 14.94742132 | 15.19637988 | 15.45038205 | 15.70953253 | 14 |
| 15 | 16.09689554 | 16.38633463 | 16.68213778 | 16.98444935 | 15 |
| 16 | 17.25786449 | 17.59116382 | 17.93236984 | 18.28167721 | 16 |
| 17 | 18.43044314 | 18.81105336 | 19.20135539 | 19.60160656 | 17 |
| 18 | 19.61474757 | 20.04619153 | 20.48937572 | 20.94463468 | 18 |
| 19 | 20.81089504 | 21.29676893 | 21.79671636 | 22.31116578 | 19 |
| 20 | 22.01900399 | 22.56297854 | 23.12366710 | 23.70161119 | 20 |
| 21 | 23.23919403 | 23.84501577 | 24.47052211 | 25.11638938 | 21 |
| 22 | 24.47158598 | 25.14307847 | 25.83757994 | 26.55592620 | 22 |
| 23 | 25.71630183 | 26.45736695 | 27.22514364 | 28.02065490 | 23 |
| 24 | 26.97346485 | 27.78808403 | 28.63352080 | 29.51101637 | 24 |
| 25 | 28.24319950 | 29.13543508 | 30.06302361 | 31.02745915 | 25 |
| 26 | 29.52563150 | 30.49962802 | 31.51396896 | 32.57043969 | 26 |
| 27 | 30.82088781 | 31.88087337 | 32.98667850 | 34.14042238 | 27 |
| 28 | 32.12909669 | 33.27938429 | 34.48147867 | 35.73787977 | 28 |
| 29 | 33.45038766 | 34.69537659 | 35.99870085 | 37.36329267 | 29 |
| 30 | 34.78489153 | 36.12906880 | 37.53868137 | 39.01715029 | 30 |
| 31 | 36.13274045 | 37.58068216 | 39.10176159 | 40.69995042 | 31 |
| 32 | 37.49406785 | 39.05044069 | 40.68828801 | 42.41219955 | 32 |
| 33 | 38.86900853 | 40.53857120 | 42.29861233 | 44.15441305 | 33 |
| 34 | 40.25769862 | 42.04530334 | 43.93309152 | 45.92711527 | 34 |
| 35 | 41.66027560 | 43.57086963 | 45.59208789 | 47.73083979 | 35 |
| 36 | 43.07687836 | 45.11550550 | 47.27596921 | 49.56612949 | 36 |
| 37 | 44.50764714 | 46.67944932 | 48.98510874 | 51.43353675 | 37 |
| 38 | 45.95272361 | 48.26294243 | 50.71988538 | 53.33362365 | 38 |
| 39 | 47.41225085 | 49.86622921 | 52.48068366 | 55.26696206 | 39 |
| 40 | 48.88637336 | 51.48955708 | 54.26789391 | 57.23413390 | 40 |
| 41 | 50.37523709 | 53.13317654 | 56.08191232 | 59.23573124 | 41 |
| 42 | 51.87898946 | 54.79734125 | 57.92314100 | 61.27235654 | 42 |
| 43 | 53.39777936 | 56.48230801 | 59.79198812 | 63.34462278 | 43 |
| 44 | 54.93175715 | 58.18833687 | 61.68886794 | 65.45315367 | 44 |
| 45 | 56.48107472 | 59.91569108 | 63.61420096 | 67.59858386 | 45 |
| 46 | 58.04588547 | 61.66463721 | 65.56841398 | 69.78155908 | 46 |
| 47 | 59.62634432 | 63.43544518 | 67.55194018 | 72.00273637 | 47 |
| 48 | 61.22260777 | 65.22838824 | 69.56521929 | 74.26278425 | 48 |
| 49 | 62.83483385 | 67.04374310 | 71.60869758 | 76.56238298 | 49 |
| 50 | 64.46318218 | 68.88178989 | 73.68282804 | 78.90222468 | 50 |

TABLE III.

$$
s_{\bar{n}}=\left[(1+i)^{n}-1\right] i
$$

| $n$ | $1 \%$ | $1{ }_{4}{ }_{6}$ | 1\% ${ }_{2}$ | $1{ }^{3} \sigma_{0}$ | " |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 66.10781401 | 70.74281226 | 75.78807046 | 81.28301361 | 51 |
| 52 | 67.76889215 | 72.62709741 | 77.92489152 | 83.70546635 | 52 |
| 53 | 69.44658107 | 74.53493613 | 80.09376489 | 86.17031201 | 53 |
| 54 | 71.14104688 | 76.46662283 | 82.29517136 | 88.67829247 | 54 |
| 55 | 72.85245735 | 78.42245562 | 84.52959893 | 91.23016259 | 55 |
| 56 | 74.58098192 | 80.40273631 | 86.79754292 | 93.82669043 | 56 |
| 57 | 76.32679174 | 82.40777052 | 89.09950606 | 96.46865752 | 57 |
| 58 | 78.09005966 | 84.43786765 | 91.43599865 | 99.15685902 | 58 |
| 59 | 79.87096025 | 86.49334099 | 93.80753863 | 101.89210405 | 59 |
| 60 | 81.66966986 | 88.57450776 | 96.21465171 | 104.67521588 | 60 |
| 61 | 83.48636655 | 90.68168910 | 98.65787149 | 107.50703215 | 61 |
| 62 | 85.32123022 | 92.81521022 | 101.13773956 | 110.38840522 | 62 |
| 63 | 87.17444252 | 94.97540034 | 103.65480565 | 113.32020231 | 63 |
| 64 | 89.04618695 | 97.16259285 | 106.20962774 | 116.30330585 | 64 |
| 65 | 90.93664882 | 99.37712526 | 108.80277215 | 119.33861370 | 65 |
| 66 | 92.84601531 | 101.61933933 | 111.43481374 | 122.42703944 | 66 |
| 67 | 94.77447546 | 103.88958107 | 114.10633594 | 125.56951263 | 67 |
| 68 | 96.72222021 | 106.18820083 | 116.81793098 | 128.76697910 | 68 |
| 69 | 98.68944242 | 108.51555334 | 119.57019995 | 132.02040124 | 69 |
| 70 | 100.67633684 | 110.87199776 | 122.36375295 | 135.33075826 | 70 |
| 71 | 102.68310021 | 113.25789773 | 125.19920924 | 138.69904653 | 71 |
| 72 | 104.70993121 | 115.67362145 | 128.07719738 | 142.12627984 | 72 |
| 73 | 106.75703052 | 118.11954172 | 130.99835534 | 145.61348974 | 73 |
| 74 | 108.82460083 | 120.59603599 | 133.96333067 | 149.16172581 | 74 |
| 75 | 110.91284684 | 123.10348644 | 136.97278063 | 152.77205601 | 75 |
| 76 | 113.02197530 | 125.64228002 | 140.02737234 | 156.44556699 | 76 |
| 77 | 115.15219506 | 128.21280852 | 143.12778292 | 160.18336441 | 77 |
| 78 | 117.30371701 | 130.81546863 | 146.27469967 | 163.98657329 | 78 |
| 79 | 119.47675418 | 133.45066199 | 149.46882016 | 167.85633832 | 79 |
| 80 | 121.67152172 | 136.11879526 | 152.71085247 | 171.79382424 | 80 |
| 81 | 123.88823694 | 138.82028020 | 156.00151525 | 175.80021617 | 81 |
| 82 | 126.12711931 | 141.55553370 | 159.34153798 | 179.87671995 | 82 |
| 83 | 128.38839050 | 144.32497787 | 162.73166105 | 184.02456255 | 83 |
| 84 | 130.67227440 | 147.12904010 | 166.17263597 | 188.24499239 | 84 |
| 85 | 132.97899715 | 149.96815310 | 169.66522551 | 192.53927976 | 85 |
| 86 | 135.30878712 | 152.84275501 | 173.21020389 | 196.90871716 | 86 |
| 87 | 137.66187499 | 155.75328945 | 176.80835695 | 201.35461971 | 87 |
| 88 | 140.03849374 | 158.70020557 | 180.46048230 | 205.87832555 | 88 |
| 89 | 142.43887868 | 161.68395814 | 184.16738954 | 210.48119625 | 89 |
| 90 | 144.86326746 | 164.70500762 | 187.92990038 | 215.16461718 | 90 |
| 91 | 147.31190014 | 167.76382021 | 191.74884889 | 219.92999798 | 91 |
| 92 | 149.78501914 | 170.86086796 | 195.62508162 | 224.77877295 | 92 |
| 93 | 152.28286933 | 173.99662881 | 199.55945784 | 229.71240148 | 93 |
| 94 | 154.80569803 | 177.17158667 | 203.55284971 | 234.73236850 | 94 |
| 95 | 157.35375501 | 180.38623151 | 207.60614246 | 239.84018495 | 95 |
| 96 | 159.92729256 | 183.64105940 | 211.72023459 | 245.03738819 | 96 |
| 97 | 162.52656548 | 186.93657264 | 215.89603811 | 250.32554248 | 97 |
| 98 | 165.15183114 | 190.27327980 | 220.13447868 | 255.70623947 | 98 |
| 99 | 167.80334945 | 193.65169580 | 224.43649586 | 261.18109866 | 99 |
| 100 | 170.48138294 | 197.07234200 | 228.80304330 | 266.75176789 | 100 |

## Amount of 1 per Annum at Compound Interest

TABLE III. $\quad s_{\bar{n}}=\left[(1+i)^{n}-1\right] / i$

| " | $2 \%$ | 21\% | $21 / 2 \%$ | $23_{4}{ }^{5}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.00000000 | 1.00000000 | 1.00000000 | 1.00000000 | 1 |
| 2 | 2.02000000 | 2.02250000 | 2.02500000 | 2.02750000 | 2 |
| 3 | 3.06040000 | 3.06800625 | 3.07562500 | 3.08325625 | 3 |
| 4 | 4.12160800 | 4.13703639 | 4.15251563 | 4.16804580 | 4 |
| 5 | 5.20404016 | 5.23011971 | 5.25632852 | 5.28266706 | 5 |
| 6 | 6.30812096 | 6.34779740 | 6.38773673 | 6.42794040 | 6 |
| 7 | 7.43428338 | 7.49062284 | 7.54743015 | 7.60470876 | 7 |
| 8 | 8.58296905 | 8.65916186 | 8.73611590 | 8.81383825 | 8 |
| 9 | 9.75462843 | 9.85399300 | 9.95451880 | 10.05621880 | 9 |
| 10 | 10.94972100 | 11.07570784 | 11.20338177 | 11.33276482 | 10 |
| 11 | 12.16871542 | 12.32491127 | 12.48346631 | 12.64441585 | 1 |
| 12 | 13.41208973 | 13.60222177 | 13.79555297 | 13.99213729 | 2 |
| 13 | 14.68033152 | 14.90827176 | 15.14044179 | 15.37692107 | 13 |
| 14 | 15.97393815 | 16.24370788 | 16.51895284 | 16.79978639 | 14 |
| 15 | 17.29341692 | 17.60919130 | 17.93192666 | 18.26178052 | 15 |
| 16 | 18.63928525 | 19.00539811 | 19.38022483 | 19.76397948 | 6 |
| 17 | 20.01207096 | 20.43301957 | 20.86473045 | 21.30748892 | 17 |
| 18 | 21.41231238 | 21.89276251 | 22.38634871 | 22.89344487 | 18 |
| 19 | 22.84055863 | 23.38534966 | 23.94600743 | 24.52301460 | 19 |
| 20 | 24.29736980 | 24.91152003 | 25.54465761 | 26.19739750 | 20 |
| 21 | 25.78331719 | 26.47202923 | 27.18327405 | 27.91782593 | 21 |
| 22 | 27.29898354 | 28.06764989 | 28.86285590 | 29.68556615 | 22 |
| 23 | 28.84496321 | 29.69917201 | 30.58442730 | 31.50191921 | 23 |
| 24 | 30.42186247 | 31.36740338 | 32.34903798 | 33.36822199 | 24 |
| 25 | 32.03029972 | 33.07316996 | 34.15776393 | 35.28584810 | 25 |
| 26 | 33.67090572 | 34.81731628 | 36.01170803 | 37.25620892 | 26 |
| 27 | 35.34432383 | 36.60070590 | 37.91200073 | 39.28075467 | 27 |
| 28 | 37.05121031 | 38.42422178 | 39.85980075 | 41.36097542 | 28 |
| 29 | 38.79223451 | 40.28876677 | 41.85629577 | 43.49840224 | 29 |
| 30 | 40.56807921 | 42.19526402 | 43.90270316 | 45.69460830 | 30 |
| 31 | 42.37944079 | 44.14465746 | 46.00027074 | 47.95121003 | 31 |
| 32 | 44.22702961 | 46.13791226 | 48.15027751 | 50.26986831 | 32 |
| 33 | 46.11157020 | 48.17601528 | 50.35403445 | 52.65228969 | 33 |
| 34 | 48.03380160 | 50.25997563 | 52.61288531 | 55.10022765 | 34 |
| 35 | 49.99447763 | 52.39082508 | 54.92820744 | 57.61548391 | 35 |
| 36 | 51.99436719 | 54.56961864 | 57.30141263 | 60.19990972 | 36 |
| 37 | 54.03425453 | 56.79743506 | 59.73394794 | 62.85540724 | 37 |
| 38 | 56.11493962 | 59.07537735 | 62.22729664 | 65.58393094 | 38 |
| 39 | 58.23723841 | 61.40457334 | 64.78297906 | 68.38748904 | 39 |
| 40 | 60.40198318 | 63.78617624 | 67.40255354 | 71.26814499 | 40 |
| 41 | 62.61002284 | 66.22136521 | 70.08761737 | 74.22801898 | 41 |
| 42 | 64.86222330 | 68.71134592 | 72.83980781 | 77.26928950 | 42 |
| 43 | 67.15946777 | 71.25735121 | 75.66080300 | 80.39419496 | 43 |
| 44 | 69.50265712 | 73.86064161 | 78.55232308 | 83.60503532 | 44 |
| 45 | 71.89271027 | 76.52250605 | 81.51613116 | 86.90417379 | 45 |
| 46 | 74.33056447 | 79.24426243 | 84.55403443 | 90.29403857 | 46 |
| 47 | 76.81717576 | 82.02725834 | 87.66788530 | 93.77712463 | 47 |
| 48 | 79.35351927 | 84.87287165 | 90.85958243 | 97.35599556 | 48 |
| 49 | 81.94058966 | 87.78251126 | 94.13107199 | 101.03328544 | 49 |
| 50 | 84.57940145 | 90.75761776 | 97.48434879 | 104.81170079 | 50 |

Amount of 1 per Annum at Compound Interest
TABLE III.

$$
s_{\overline{n i}}=\left[(1+i)^{n}-1\right] / i
$$

| $n$ | $2 \%$ | 21\% | $2 \%$ | 23.4 | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 87.27098948 | 93.79966416 | 100.92145751 | 108.69402256 | 51 |
| 52 | 90.01640927 | 96.91015661 | 104.44449395 | 112.68310818 | 52 |
| 53 | 92.81673746 | 100.09063513 | 108.05560629 | 116.78189365 | 53 |
| 54 | 95.67307221 | 103.34267442 | 111.75699645 | 120.99339573 | 54 |
| 55 | 98.58653365 | 106.66788460 | 115.55092136 | 125.32071411 | 55 |
| 56 | 101.55826432 | 110.06791200 | 119.43969440 | 129.76703375 | 56 |
| 57 | 104.58942961 | 113.54444002 | 123.42568676 | 134.33562718 | 57 |
| 58 | 107.68121820 | 117.09918992 | 127.51132893 | 139.02985692 | 58 |
| 59 | 110.83484257 | 120.73392169 | 131.69911215 | 143.85317799 | 59 |
| 60 | 114.05153942 | 124.45043493 | 135.99158995 | 148.80914038 | 60 |
| 61 | 117.33257021 | 128.25056972 | 140.39137970 | 153.90139174 | 61 |
| 62 | 120.67922161 | 132.13620754 | 144.90116419 | 159.13368002 | 62 |
| 63 | 124.09280604 | 136.10927221 | 149.52369330 | 164.50985622 | 63 |
| 64 | 127.57466216 | 140.17173083 | 154.26178563 | 170.03387726 | 64 |
| 65 | 131.12615541 | 144.32559477 | 159.11833027 | 175.70980889 | 65 |
| 66 | 134.74867852 | 148.57292066 | 164.09628853 | 181.54182863 | 66 |
| 67 | 138.44365209 | 152.91581137 | 169.19869574 | 187.53422892 | 67 |
| 68 | 142.21252513 | 157.35641713 | 174.42866314 | 193.69142021 | 68 |
| 69 | 146.05677563 | 161.89693651 | 179.78937971 | 200.01793427 | 69 |
| 70 | 149.97791114 | 166.53961758 | 185.28411421 | 206.51842746 | 70 |
| 71 | 153.97746937 | 171.28675898 | 190.91621706 | 213.19768422 | 71 |
| 72 | 158.05701875 | 176.14071106 | 196.68912249 | 220.06062054 | 72 |
| 73 | 162.21815913 | 181.10387705 | 202.60635055 | 227.11228760 | 73 |
| 74 | 166.46252231 | 186.17871429 | 208.67150931 | 234.35787551 | 74 |
| 75 | 170.79177276 | 191.36773536 | 214.88829705 | 241.80271709 | 75 |
| 76 | 175.20760821 | 196.67350941 | 221.26050447 | 249.45229181 | 76 |
| 77 | 179.71176038 | 202.09866337 | 227.79201709 | 257.31222983 | 77 |
| 78 | 184.30599558 | 207.64588329 | 234.48681751 | 265.38831615 | 78 |
| 79 | 188.99211549 | 213.31791567 | 241.34898795 | 273.68649485 | 79 |
| 80 | 193.77195780 | 219.11756877 | 248.38271265 | 282.21287345 | 80 |
| 81 | 198.64739696 | 225.04771407 | 255.59228047 | 290.97372747 | 81 |
| 82 | 203.62034490 | 231.11128763 | 262.98208748 | 299.97550498 | 82 |
| 83 | 208.69275180 | 237.31129160 | 270.55663966 | 309.22483137 | 83 |
| 84 | 213.86660683 | 243.65079567 | 278.32055566 | 318.72851423 | 84 |
| 85 | 219.14393897 | 250.13293857 | 286.27856955 | 328.49354837 | 85 |
| 86 | 224.52681775 | 256.76092969 | 294.43553379 | 338.52712095 | 86 |
| 87 | 230.01735411 | 263.53805060 | 302.79642213 | 348.83661678 | 87 |
| 88 | 235.61770119 | 270.46765674 | 311.36633268 | 359.42962374 | 88 |
| 89 | 241.33005521 | 277.55317902 | 320.15049100 | 370.31393839 | 89 |
| 90 | 247.15665632 | 284.79812555 | 329.15425328 | 381.49757170 | 90 |
| 91 | 253.09978944 | 292.20608337 | 338.38310961 | 392.98875492 | 91 |
| 92 | 259.16178523 | 299.78072025 | 347.84268735 | 404.79594568 | 92 |
| 93 | 265.34502094 | 307.52578645 | 357.53875453 | 416.92783418 | 93 |
| 94 | 271.65192135 | 315.44511665 | 367.47722339 | 429.39334962 | 94 |
| 95 | 278.08495978 | 323.54263177 | 377.66415398 | 442.20166674 | 95 |
| 96 | 284.64665898 | 331.82234099 | 388.10575783 | 455.36221257 | 96 |
| 97 | 291.3395 9216 | 340.28834366 | 398.80840177 | 468.88467342 | 97 |
| 98 | 298.16638400 | 348.94483139 | 409.77861182 | 482.77900194 | 98 |
| 99 | 305.12971168 | 357.79609010 | 421.02307711 | 497.05542449 | 99 |
| 100 | 312.23230591 | 366.84650213 | 432.54865404 | 511.72444867 | 100 |

## Amount of 1 per Annum at Compound Interest

TABLE III.

- $s_{\bar{n}}=\left[(1+i)^{n}-1\right] i$

| $n$ | 3. | $3 \frac{1}{2} \%$ | $4_{C}$ | 4\% $2 \%$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.00000000 | 1.00000000 | 1.00000000 | 1.00000000 | 1 |
| 2 | 2.03000000 | 2.03500000 | 2.04000000 | 2.04500000 | 2 |
| 3 | 2.09090000 | 3.10622500 | 3.12160000 | 3.13702500 | 3 |
| 4 | 4.18362700 | 4.21494288 | 4.24646400 | 4.27819113 | 4 |
| 5 | 5.30913581 | 5.36246588 | 5.41632256 | 5.47070973 | 5 |
| 6 | 6.46840988 | 6.55015218 | 6.63297546 | 6.71689166 | 6 |
| 7 | 7.66246218 | 7.77940751 | 7.89929448 | 8.01915179 | 7 |
| 8 | 8.89233605 | 9.05168677 | 9.21422626 | 9.38001362 | 8 |
| 9 | 10.15910613 | 10.36849581 | 10.58279531 | 10.80211423 | 9 |
| 10 | 11.46387931 | 11.73139316 | 12.00610712 | 12.28820937 | 10 |
| 11 | 12.80779569 | 13.14199192 | 13.48635141 | 13.84117879 | 11 |
| 12 | 14.19202956 | 14.60196164 | 15.02580546 | 15.46503184 | 12 |
| 13 | 15.61779045 | 16.11303030 | 16.62683768 | 17.15991327 | 13 |
| 14 | 17.08632416 | 17.67698636 | 18.29191119 | 18.93210937 | 14 |
| 15 | 18.59891389 | 19.29568088 | 20.02358764 | 20.78405429 | 15 |
| 16 | 20.15688130 | 20:9710 2971 | 21.82453114 | 22.71933673 | 16 |
| 17 | 21.76158774 | 22.70501575 | 23.69751239 | 24.74170689 | 17 |
| 18 | 23.41443537 | 24.49969130 | 25.64541288 | 26.85508370 | 18 |
| 19 | 25.11686844 | 26.35718050 | 27.67122940 | 29.06356246 | 19 |
| 20 | 26.87037449 | 28.27968181 | 29.77807858 | 31.37142277 | 20 |
| 21 | 28.67648572 | 30.26947068 | 31.96921072 | 33.78313680 | 21 |
| 22 | 30.53678030 | 32.32890215 | 34.24796979 | 36.30337795 | 22 |
| 23 | 32.45288370 | 34.46041373 | 36.61788858 | 38.93702996 | 23 |
| 24 | 34.42647022 | 36.66652821 | 39.08260412 | 41.68919631 | 24 |
| 25 | 36.45926432 | 38.94985669 | 41.64590829 | 44.56521015 | 25 |
| 26 | 38.55304225 | 41.31310168 | 44.31174462 | 47.57064460 | 26 |
| 27 | 40.70963352 | 43.75906024 | 47.08421440 | 50.71132361 | 27 |
| 28 | 42.93092252 | 46.29062734 | 49.96758298 | 53.99333317 | 28 |
| 29 | 45.21885020 | 48.91079930 | 52.96628630 | 57.42303316 | 29 |
| 30 | 47.57541571 | 51.62267728 | 56.08493775 | 61.00706966 | 30 |
| 31 | 50.00267818 | 54.42947098 | 59.32833526 | 64.75238779 | 31 |
| 32 | 52.50275852 | 57.33450247 | 62.70146867 | 68.66624524 | 32 |
| 33 | 55.07784128 | 60.34121005 | 66.20952742 | 72.75622628 | 33 |
| 34 | 57.73017652 | 63.45315240 | 69.85790851 | 77.03025646 | 34 |
| 35 | 60.46208181 | 66.67401274 | 73.65222486 | 81.49661800 | 35 |
| 36 | 63.27594427 | 70.00760318 | 77.59831385 | 86.16396581 | 36 |
| 37 | 66.17422259 | 73.45786930 | 81.70224640 | 91.04134427 | 37 |
| 38 | 69.15944927 | 77.02889472 | 85.97033626 | 96.13820476 | 38 |
| 39 | 72.23423275 | 80.72490604 | 90.40914971 | 101.46442398 | 39 |
| 40 | 75.40125973 | 84.55027775 | 95.02551570 | 107.03032306 | 40 |
| 41 | 78.66329753 | 88.50953747 | 99.82653633 | 112.84668760 | 41 |
| 42 | 82.02319645 | 92.60737128 | 104.81959778 | 118.92478854 | 42 |
| 43 | 85.48389234 | 96.84862928 | 110.01238169 | 125.27640402 | 43 |
| 44 | 89.04840911 | 101.23833130 | 115.41287696 | 131.91384220 | 44 |
| 45 | 92.71986139 | 105.78167290 | 121.02939204 | 138.84996510 | 45 |
| 46 | 96.50145723 | 110.48403145 | 126.87056772 | 146.09821353 | 46 |
| 47 | 100.39650095 | 115.35097255 | 132.94539043 | 153.67263314 | 47 |
| 48 | 104.40839598 | 120.38825659 | 139.26320604 | 161.58790163 | 48 |
| 49 | 108.54064785 | 125.60184557 | 145.83373429 | 169.85935720 | 49 |
| 50 | 112.79686729 | 130.99791016 | 152.66708366 | 178.50302828 | 50 |

## Amount of 1 per Annum at Compound Interest

TABLE III.

$$
s_{\bar{n}}=\left[(1+i)^{n}-1\right] i
$$

| $n$ | $3 \%$ | $3^{1} \%$ | $4^{\circ}$ | $4^{1}{ }_{2} \mathrm{C}$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 117.18077331 | 136.58283702 | 159.77376700 | 187.53566455 | 51 |
| 52 | 121.69619651 | 142.36323631 | 167.16471768 | 196.97476946 | 52 |
| 53 | 126.34708240 | 148.34594958 | 174.85130639 | 206.83863408 | 53 |
| 54 | 131.13749488 | 154.53805782 | 182.84535865 | 217.14637262 | 54 |
| 55 | 136.07161972 | 160.94688984 | 191.15917299 | 227.91795938 | 55 |
| 56 | 141.15376831 | 167.58003099 | 199.80553991 | 239.17426756 | 56 |
| 57 | 146.38838136 | 174.44533207 | 208.79776151 | 250.93710960 | 57 |
| 58 | 151.78003280 | 181.55091869 | 218.14967197 | 263.22927953 | 58 |
| 59 | 157.33343379 | 188.90520085 | 227.87565885 | 276.07459711 | 59 |
| 60 | 163.05343680 | 196.51688288 | 237.99068520 | 289.49795398 | 60 |
| 61 | 168.94503991 | 204.39497378 | 248.51031261 | 303.52536190 | 61 |
| 62 | 175.01339110 | 212.54879786 | 259.45072511 | 318.18400319 | 62 |
| 63 | 181.26379284 | 220.98800579 | 270.82875412 | 333.50228333 | 63 |
| 64 | 187.70170662 | 229.72258599 | 282.66190428 | 349.50988608 | 64 |
| 65 | 194.33275782 | 238.76287650 | 294.96838045 | 366.23783096 | 65 |
| 66 | 201.16274055 | 248.11957718 | 307.76711567 | 383.71853335 | 66 |
| 67 | 208.19762277 | 257.80376238 | 321.07780030 | 401.98586735 | 67 |
| 68 | 215.44355145 | 267.82689406 | 334.92091231 | 421.07523138 | 68 |
| 69 | 222.90685800 | 278.20083535 | 349.31774880 | 441.02361679 | 69 |
| 70 | 230.59406374 | 288.93786459 | 364.29045876 | 461.86967955 | 70 |
| 71 | 238.51188565 | 300.05068985 | 379.86207711 | 483.65381513 | 71 |
| 72 | 246.66724222 | 311.55246400 | 396.05656019 | 506.41823681 | 72 |
| 73 | 255.06725949 | 323.45680024 | 412.89882260 | 530.20705747 | 73 |
| 74 | 263.71927727 | 335.77778824 | 430.41477550 | 555.06637505 | 74 |
| 75 | 272.63085559 | 348.53001083 | 448.63136652 | 581.04436193 | 75 |
| 76 | 281.80978126 | 361.72856121 | 467.57662118 | 608.19135822 | 76 |
| 77 | 291.26407469 | 375.38906085 | 487.27968603 | 636.55996934 | 77 |
| 78 | 301.00199693 | 389.52767798 | 507.77087347 | 666.20516796 | 78 |
| 79 | 311.03205684 | 404.16114671 | 529.08170841 | 697.18440052 | 79 |
| 80 | 321.36301855 | 419.30678685 | 551.24497675 | 729.55769854 | 80 |
| 81 | 332.00390910 | 434.98252439 | 574.29477582 | 763.38779497 | 81 |
| 82 | 342.96402638 | 451.20691274 | 598.26656685 | 798.74024575 | 82 |
| 83 | 354.25294717 | 467.99915469 | 623.19722952 | 835.68355680 | 83 |
| 84 | 365.88053558 | 485.37912510 | 649.12511870 | 874.28931686 | 84 |
| 85 | 377.85695165 | 503.36739448 | $676.09012345$ | 914.63233612 | 85 |
| 86 | 390.19266020 | 521.98525329 | 704.13372839 | 956.79079125 | 86 |
| 87 | 402.89844001 | 541.25473715 | 733.29907753 | 1000.84637685 | 87 |
| 88 | 415.98539321 | 561.19865295 | 763.63104063 | 1046.88446381 | 88 |
| 89 | 429.46495500 | 581.84060581 | 795.17628225 | 1094.99426468 | 89 |
| 90 | 443.34890365 | 603.20502701 | 827.98333354 | 1145.26900659 | 90 |
| 91 | 457.64937076 | 625.31720295 | 862.10266688 | 1197.80611189 | 91 |
| -92 | 472.37885189 | 648.20330506 | 897.58677356 | 1252.70738692 | 92 |
| 93 | 487.55021744 | 671.89042073 | 934.49024450 | 1310.07921933 | 93 |
| 94 | 503.17672397 | 696.40658546 | 972.86985428 | 1370.03278420 | 94 |
| 95 | 519.27202569 | 721.78081595 | 1012.78464845 | 1432.68425949 | 95 |
| 96 | 535.85018645 | 748.04314451 | 1054.29603439 | 1498.15505117 | 96 |
| 97 | 552.92569205 | 775.22465457 | 1097.46787577 | 1566.57202847 | 97 |
| 98 | 570.51346281 | 803.35751748 | 1142.36659080 | 1638.06776976 | 98 |
| 99 | 588.62886669 | 832.47503059 | 1189.06125443 | 1712.78081939 | 99 |
| 100 | 607.28773270 | 862.61165666 | 1237.62370461 | 1790.85595627 | 100 |

## Amount of 1 per Annum at Compound Interest

TABLE III.

$$
s_{\bar{n}}=\left[(1+i)^{n}-1\right] / i
$$

| $n$ | 50 | $5 \%$ | $6 \%$ | 7\% | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.00000000 | 1.00000000 | 1.00000000 | 1.00000000 | 1 |
| 2 | 2.05000000 | 2.05500000 | 2.06000000 | 2.07000000 | 2 |
| 3 | 3.15250000 | 3.16802500 | 3.18360000 | 3.21490000 | 3 |
| 4 | 4.31012500 | 4.34226638 | 4.37461600 | 4.43994300 | 4 |
| 5 | 5.52563125 | 5.58109103 | 5.63709296 | 5.75073901 | 5 |
| 6 | 6.80191281 | 6.88805103 | 6.97531854 | 7.15329074 | 6 |
| 7 | 8.14200845 | 8.26689384 | 8.39383765 | 8.65402109 | 7 |
| 8 | 9.54910888 | 9.72157300 | 9.89746791 | 10.25980257 | 8 |
| 9 | 11.02656432 | 11.25625951 | 11.49131598 | 11.97798875 | 9 |
| 10 | 12.57789254 | 12.87535379 | 13.18079494 | 13.81644796 | 10 |
| 11 | 14.20678716 | 14.58349825 | 14.97164264 | 15.78359932 | 11 |
| 12 | 15.91712652 | 16.38559065 | 16.86994120 | 17.88845127 | 12 |
| 13 | 17.71298285 | 18.28679814 | 18.88213767 | 20.14064286 | 13 |
| 14 | 19.59863199 | 20.29257203 | 21.01506593 | 22.55048786 | 14 |
| 15 | 21.57856359 | 22.40866350 | 23.27596988 | 25.12902201 | 15 |
| 16 | 23.65749177 | 24.64113999 | 25.67252808 | 27.88805355 | 16 |
| 17 | 25.84036636 | 26.99640269 | 28.21287976 | 30.84021730 | 17 |
| 18 | 28.13238467 | 29.48120483 | 30.90565255 | 33.99903251 | 18 |
| 19 | 30.53900391 | 32.10267110 | 33.75999170 | 37.37896479 | 19 |
| 20 | 33.06595410 | 34.86831801 | 36.78559120 | 40.99549232 | 20 |
| 21 | 35.71925181 | 37.78607550 | 39.99272668 | 44.86517678 | 21 |
| 22 | 38.50521440 | 40.86430965 | 43.39229028 | 49.00573916 | 22 |
| 23 | 41.43047512 | 44.11184669 | 46.99582769 | 53.43614090 | 23 |
| 24 | 44.50199887 | 47.53799825 | 50.81557735 | 58.17667076 | 24 |
| 25 | 47.72709882 | 51.15258816 | 54.86451200 | 63.24903772 | 25 |
| 26 | 51.11345376 | 54.96598051 | 59.15638272 | 68.67647036 | 26 |
| 27 | 54.66912645 | 58.98910943 | 63.70576568 | 74.48382328 | 27 |
| 28 | 58.40258277 | 63.23351045 | 68.52811162 | 80.69769091 | 28 |
| 29 | 62.32271191 | 67.71135353 | 73.63979832 | 87.34652927 | 29 |
| 30 | 66.43884750 | 72.43547797 | 79.05818622 | 94.46078632 | 30 |
| 31 | 70.76078988 | 77.41942926 | 84.80167739 | 102.07304137 | 31 |
| 32 | 75.29882937 | 82.67749787 | 90.88977803 | 110.21815426 | 32 |
| 33 | 80.06377084 | 88.22476025 | 97.34316471 | 118.93342506 | 33 |
| 34 | 85.06695938 | 94.07712207 | 104.18375460 | 128.25876481 | 34 |
| 35 | 90.32030735 | 100.25136378 | 111.43477987 | 138.23687835 | 35 |
| 36 | 95.83632272 | 106.76518879 | 119.12086666 | 148.91345984 | 36 |
| 37 | 101.62813886 | 113.63727417 | 127.26811866 | 160.33740202 | 37 |
| 38 | 107.70954580 | 120.88732425 | 135.90420578 | 172.56102017 | 38 |
| 39 | 114.09502309 | 128.53612708 | 145.05845813 | 185.64029158 | 39 |
| 40 | 120.79977424 | 136.60561407 | 154.76196562 | 199.63511199 | 40 |
| 41 | 127.83976295 | 145.11892285 | 165.04768356 | 214.60956983 | 41 |
| 42 | 135.23175110 | 154.10046360 | 175.95054457 | 230.63223972 | 42 |
| 43 | 142.99333866 | 163.57598910 | 187.50757724 | 247.77649650 | 43 |
| 44 | 151.14300559 | 173.57266850 | 199.75803188 | 266.12085125 | 44 |
| 45 | 159.70015587 | 184.11916527 | 212.74351379 | 285.74931084 | 45 |
| 46 | 168.68516366 | 195.24571936 | 226.50812462 | 306.75176260 | 46 |
| 47 | 178.11942185 | 206.98423392 | 241.09861210 | 329.22438598 | 47 |
| 48 | 188.02539294 | 219.36836679 | 256.56452882 | 353.27009300 | 48 |
| 49 | 198.42666259 | 232.43362696 | 272.95840055 | 378.99899951 | 49 |
| 50 | 209.34799572 | 246.21747645 | 290.33590458 | 406.52892947 | 50 |

Amount of 1 per Annum at Compound Interest
TABLE III.

$$
s_{\bar{n}}=\left[(1+i)^{n}-1\right] / i
$$

| $n$ | $5 \%$ | $5 \%$ | $6_{0}$ | $7 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 220.81539550 | 260.75943765 | 308.75605886 | 435.98585454 | 51 |
| 52 | 232.85616528 | 276.10120672 | 328.28142239 | 467.50497135 | 52 |
| 53 | 245.49897354 | 292.28677309 | 348.97830773 | 501.23031935 | 53 |
| 54 | 258.77392222 | 309.36254561 | 370.91700620 | 537.31644170 | 54 |
| 55 | 272.71261833 | 327.37748562 | 394.17202657 | 575.92859262 | 55 |
| 56 | 287.34824924 | 346.38324733 | 418.82234816 | 617.24359410 | 56 |
| 57 | 302.71566171 | 366.43432593 | 444.95168905 | 661.45064569 | 57 |
| 58 | 318.85144479 | 387.58821386 | 472.64879040 | 708.75219089 | 58 |
| 59 | 335.79401703 | 409.90556562 | 502.00771782 | 759.36484425 | 59 |
| 60 | 353.58371788 | 433.45037173 | 533.12818089 | 813.52038335 | 60 |
| 61 | 372.26290378 | 458.29014217 | 566.11587174 | 871.46681019 | 61 |
| 62 | 391.87604897 | 484.49609999 | 601.08282405 | 933.46948690 | 62 |
| 63 | 412.46985141 | 512.14338549 | 638.14779349 | 999.81235098 | 63 |
| 64 | 434.09334398 | 541.31127170 | 677.43666110 | 1070.79921555 | 64 |
| 65 | 456.79801118 | 572.08339164 | 719.08286076 | 1146.75516064 | 65 |
| 66 | 480.63791174 | 604.54797818 | 763.22783241 | 1228.02802188 | 66 |
| 67 | 505.66980733 | 638.79811698 | 810.02150236 | 1314.98998341 | 67 |
| 68 | 531.95329770 | 674.93201341 | 859.62279250 | 1408.03928225 | 68 |
| 69 | 559.55096258 | 713.05327415 | 912.20016005 | 1507.60203201 | 69 |
| 70 | 588.52851071 | 753.27120423 | 967.93216965 | 1614.13417425 | 70 |
| 71 | 618.95493625 | 795.70112046 | 1027.00809983 | 1728.12356645 | 71 |
| 72 | 650.90268306 | 840.46468209 | 1089.62858582 | 1850.09221610 | 72 |
| 73 | 684.44781721 | 887.69023960 | 1156.00630097 | 1980.59867123 | 73 |
| 74 | 719.67020807 | 937.51320278 | 1226.36667903 | 2120.24057821 | 74 |
| 75 | 756.65371848 | 990.07642893 | 1300.94867977 | 2269.65741869 | 75 |
| 76 | 795.48640440 | 1045.53063252 | 1380.00560055 | 2429.53343800 | 76 |
| 77 | 836.26072462 | 1104.03481731 | 1463.80593659 | 2600.60077866 | 77 |
| 78 | 879.07376085 | 1165.75673226 | 1552.63429278 | 2783.64283316 | 78 |
| 79 | 924.02744889 | 1230.87335254 | 1646.79235035 | 2979.49783148 | 79 |
| 80 | 971.22882134 | 1299.57138693 | 1746.59989137 | 3189.06267969 | 80 |
| 81 | 1020.79026240 | 1372.04781321 | 1852.39588485 | 3413.29706727 | 81 |
| 82 | 1072.82977552 | 1448.51044294 | 1964.53963794 | 3653.22786198 | 82 |
| 83 | 1127.47126430 | 1529.17851730 | 2083.41201622 | 3909.95381231 | 83 |
| 84 | 1184.84482752 | 1614.28333575 | 2209.41673719 | 4184.65057918 | 84 |
| 85 | 1245.08706889 | 1704.06891921 | 2342.98174142 | 4478.57611972 | 85 |
| 86 | 1308.34142234 | 1798.79270977 | 2484.56064591 | 4793.07644810 | 86 |
| 87 | 1374.75849345 | 1898.72630881 | 2634.63428466 | 5129.59179946 | 87 |
| 88 | 1444.49641812 | 2004.15625579 | 2793.71234174 | 5489.66322543 | 88 |
| 89 | 1517.72123903 | 2115.38484986 | 2962.33508225 | 5874.93965121 | 89 |
| 90 | 1594.60730098 | 2232.73101660 | 3141.07518718 | 6287.18542679 | 90 |
| 91 | 1675.33766603 | 2356.53122252 | 3330.53969841 | 6728.28840667 | 91 |
| 92 | 1760.10454933 | 2487.14043976 | 3531.37208032 | 7200.26859513 | 92 |
| 93 | 1849.10977680 | 2624.93316394 | 3744.25440514 | 7705.28739679 | 93 |
| 94 | 1942.56526564 | 2770.30448796 | 3969.90966944 | 8245.65751457 | 94 |
| 95 | 2040.69352892 | 2923.67123480 | 4209.10424961 | 8823.85354059 | 95 |
| 96 | 2143.72820537 | 3085.47315271 | 4462.65050459 | 9442.52328843 | 96 |
| 97 | 2251.91461564 | 3256.17417611 | 4731.40953486 | 10104.49991862 | 97 |
| 98 | 2365.51034642 | 3436.26375580 | 5016.29410696 | 10812.81491292 | 98 |
| 99 | 2484.78586374 | 3626.25826237 | 5318.27175337 | 11570.71195683 | 99 |
| 100 | 2610.02515693 | 3826.70246680 | 5638.36805857 | 12381.66179381 | 100 |

Present Value of 1 per Annum at Compound Interest
TABLE IV. , $\boldsymbol{a}_{\bar{n}}=\left(\mathbf{1}-\boldsymbol{v}^{\boldsymbol{n}}\right) / \boldsymbol{i}$

| $n$ | $1 \%$ | $1 \%$ | $112 \%$ | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.99009901 | 0.98765432 | 0.98522167 | 0.98280098 | 1 |
| 2 | 1.97039506 | 1.96311538 | 1.95588342 | 1.94869875 | 2 |
| 3 | 2.94098521 | 2.92653371 | 2.91220042 | 2.89798403 | 3 |
| 4 | 3.90196555 | 3.87805798 | 3.85438465 | 3.83094254 | 4 |
| 5 | 4.85343124 | 4.81783504 | 4.78264497 | 4.74785508 | 5 |
| 6 | 5.79547647 | 5.74600992 | 5.69718717 | 5.64899762 | 6 |
| 7 | 6.72819453 | 6.66272585 | 6.59821396 | 6.53464139 | 7 |
| 8 | 7.65167775 | 7.56812429 | 7.48592508 | 7.40505297 | 8 |
| 9 | 8.56601758 | 8.46234498 | 8.36051732 | 8.26049432 | 9 |
| 10 | 9.47130453 | 9.34552591 | 9.22218455 | 9.10122291 | 10 |
| 11 | 10.36762825 | 10.21780337 | 10.07111779 | 9.92749181 | 11 |
| 12 | 11.25507747 | 11.07931197 | 10.90750521 | 10.73954969 | 12 |
| 13 | 12.13374007 | 11.93018466 | 11.73153222 | 11.53764097 | 13 |
| 14 | 13.00370304 | 12.77055275 | 12.54338150 | 12.32200587 | 14 |
| 15 | 13.86505252 | 13.60054592 | 13.34323301 | 13.09288046 | 15 |
| 16 | 14.71787378 | 14.42029227 | 14.13126405 | 13.85049677 | 16 |
| 17 | 15.56225127 | 15.22991829 | 14.90764931 | 14.59508282 | 17 |
| 18 | 16.39826858 | 16.02954893 | 15.67256089 | 15.32686272 | 18 |
| 19 | 17.22600850 | 16.81930759 | 16.42616837 | 16.04605673 | 19 |
| 20 | 18.04555297 | 17.59931613 | 17.16863879 | 16.75288130 | 20 |
| 21 | 18.85698313 | 18.36969495 | 17.90013673 | 17.44754919 | 21 |
| 22 | 19.66037934 | 19.13056291 | 18.62082437 | 18.13026948 | 22 |
| 33 | 20.45582113 | 19.88203744 | 19.33086145 | 18.80124764 | 23 |
| 24 | 21.24338726 | 20.62423451 | 20.03040537 | 19.46068565 | 24 |
| 25 | 22.02315570 | 21.35726865 | 20.71961120 | 20.10878196 | 25 |
| 26 | 22.79520366 | 22.08125299 | 21.39863172 | 20.74573166 | 26 |
| 27 | 23.55960759 | 22.79629925 | 22.06761746 | 21.37172644 | 27 |
| 28 | 24.31644316 | 23.50251778 | 22.72671671 | 21.98695474 | 28 |
| 29 | 25.06578530 | 24.20001756 | 23.37607558 | 22.59160171 | 29 |
| 30 | 25.80770822 | 24.88890623 | 24.01583801 | 23.18584934 | 30 |
| 31 | 26.54228537 | 25.56929010 | 24.64614582 | 23.76987650 | 31 |
| 32 | 27.26958947 | 26.24127418 | 25.26713874 | 24.34385897 | 32 |
| 33 | 27.98969255 | 26.90496215 | 25.87895442 | 24.90796951 | 33 |
| 34 | 28.70266589 | 27.56045644 | 26.48172849 | 25.46237789 | 34 |
| 35 | 29.40858009 | 28.20785822 | 27.07559458 | 26.00725100 | 35 |
| 36 | 30.10750504 | 28.84726737 | 27.66068431 | 26.54275283 | 36 |
| 37 | 30.79950994 | 29.47878259 | 28.23712740 | 27.06904455 | 37 |
| 38 | 31.48466330 | 30.10250133 | 28.80505163 | 27.58628457 | 38 |
| 39 | 32.16303298 | 30.71851983 | 29.36458288 | 28.09462857 | 39 |
| 40 | 32.83468611 | 31.32693316 | 29.91584520 | 28.59422955 | 40 |
| 41 | 33.49968922 | 31.92783522 | 30.45896079 | 29.08523789 | 41 |
| 42 | 34.15810814 | 32.52131874 | 30.99405004 | 29.56780136 | 42 |
| 43 | 34.81000806 | 33.10747530 | 31.52123157 | 30.04206522 | 43 |
| 44 | 35.45545352 | 33.68639536 | 32.04062223 | 30.50817221 | 44 |
| 45 | 36.09450844 | 34.25816825 | 32.55233718 | 30.96626261 | 45 |
| 46 | 36.72723608 | 34.82288222 | 33.05648983 | 31.41647431 | 46 |
| 47 | 37.35369909 | 35.38062442 | 33.55319195 | 31.85894281 | 47 |
| 48 | 37.97395949 | 35.93148091 | 34.04255365 | 32.29380129 | 48 |
| 49 | 38.58807871 | 36.47553670 | 34.52468339 | 32.72118063 | 49 |
| 50 | 39.19611753 | 37.01287574 | 34.99968807 | 33.14120946 | 50 |

Present Value of 1 per Annum at Compound Interest
TABLE IV.

$$
a_{\bar{n}}=\left(1-v^{n}\right) / i
$$

| $n$ | $1 \%$ | $1{ }_{4}$ | $1{ }_{2} \%_{0}$ | $13_{4} \widetilde{O}_{0}$ | ' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 39.79813617 | 37.54358099 | 35.46767298 | 33.55401421 | 51 |
| 52 | 40.39419423 | 38.06773431 | 35.92874185 | 33.95971913 | 52 |
| 53 | 40.98435072 | 38.58541660 | 36.38299690 | 34.35844633 | 53 |
| 54 | 41.56866408 | 39.09670776 | 36.83053882 | 34.75031579 | 54 |
| 55 | 42.14719216 | 39.60168667 | 37.27146681 | 35.13544550 | 55 |
| 56 | 42.71999224 | 40.10043128 | 37.70587863 | 35.51395135 | 56 |
| 57 | 43.28712102 | 40.59301855 | 38.13387058 | 35.88594727 | 57 |
| 58 | 43.84863468 | 41.07952449 | 38.55553751 | 36.25154523 | 58 |
| 59 | 44.40458879 | 41.56002419 | 38.97097292 | 36.61085526 | 59 |
| 60 | 44.95503841 | 42.03459179 | 39.38026889 | 36.96398552 | 60 |
| 61 | 45.50003803 | 42.50330054 | 39.78351614 | 37.31104228 | 61 |
| 62 | 46.03964161 | 42.96622275 | 40.18080408 | 37.65213000 | 62 |
| 63 | 46.57390258 | 43.42342988 | 40.57222077 | 37.98735135 | 63 |
| 64 | 47.10287385 | 43.87499247 | 40.95785298 | 38.31680723 | 64 |
| 65 | 47.62660777 | 44.32098022 | 41.33778618 | 38.64059678 | 65 |
| 66 | 48.14515621 | 44.76146195 | 41.71210461 | 38.95881748 | 66 |
| 67 | 48.65857050 | 45.19650563 | 42.08089125 | 39.27156509 | 67 |
| 68 | 49.16690149 | 45.62617840 | 42.44422783 | 39.57893375 | 68 |
| 69 | 49.67019949 | 46.05054656 | 42.80219490 | 39.88101597 | 69 |
| 70 | 50.16851435 | 46.46967562 | 43.15487183 | 40.17790267 | 70 |
| 71 | 50.66189539 | 46.88363024 | 43.50233678 | 40.46968321 | 71 |
| 72 | 51.15039148 | 47.29247431 | 43.84466677 | 40.75644542 | 72 |
| 73 | 51.63405097 | 47.69627093 | 44.18193771 | 41.03827560 | 73 |
| 74 | 52.11292175 | 48.09508240 | 44.51422434 | 41.31525857 | 74 |
| 75 | 52.58705124 | 48.48897027 | 44.84160034 | 41.58747771 | 75 |
| 76 | 53.05648637 | 48.87799533 | 45.16413826 | 41.85501495 | 76 |
| 77 | 53.52127364 | 49.26221761 | 45.48190962 | 42.11795081 | 77 |
| 78 | 53.98145905 | 49.64169640 | 45.79498485 | 42.37636443 | 78 |
| 79 | 54.43708817 | 50.01649027 | 46.10343335 | 42.63033359 | 79 |
| 80 | 54.88820611 | 50.38665706 | 46.40732349 | 42.87993474 | 80 |
| 81 | 55.33485753 | 50.75225389 | 46.70672265 | 43.12524298 | 81 |
| 82 | 55.77708666 | 51.11333717 | 47.00169720 | 43.36633217 | 82 |
| 83 | 56.21493729 | 51.46996264 | 47.29231251 | 43.60327486 | 83 |
| 84 | 56.64845276 | 51.82218532 | 47.57863301 | 43.83614237 | 84 |
| 85 | 57.07767600 | 52.17005958 | 47.86072218 | 44.06500479 | 85 |
| 86 | 57.50264951 | 52.51363909 | 48.13864254 | 44.28993099 | 86 |
| 87 | 57.92341535 | 52.85297688 | 48.41245571 | 44.51098869 | 87 |
| 88 | 58.34001520 | 53.18812531 | 48.68222237 | 44.72824441 | 88 |
| . 89 | 58.75249030 | 53.51913611 | 48.94800234 | 44.94176355 | 89 |
| 90 | 59.16088148 | 53.84606035 | 49.20985452 | 45.15161037 | 90 |
| 91 | 59.56522919 | 54.16894850 | 49.46783696 | 45.35784803 | 91 |
| 92 | 59.96557346 | 54.48785037 | 49.72200686 | 45.56053860 | 92 |
| 93 | 60.36195392 | 54.80281518 | 49.97242055 | 45.75974310 | 93 |
| 94 | 60.75440982 | 55.11389154 | 50.21913355 | 45.95552147 | 94 |
| 95 | 61.14298002 | 55.42112744 | 50.46220054 | 46.14793265 | 95 |
| 96 | 61.52770299 | 55.72457031 | 50.70167541 | 46.33703455 | 96 |
| 97 | 61.90861682 | 56.02426698 | 50.93761124 | 46.52288408 | 97 |
| 98 | 62.28575923 | 56.32026368 | 51.17006034 | 46.70553718 | 98 |
| 99 | 62.65916755 | 56.61260610 | 51.39907422 | 46.88504882 | 99 |
| 100 | 63.02887877 | 56.90133936 | 51.62470367 | 47.06147304 | 100 |

Present Value of I per Annum at Compound Interest
TABLE IV.
$\alpha_{\bar{n}}=\left(1-v^{n}\right) / i$

| $n$ | $2 C$ | $21 / \%$ | $2 \% \%$ | $23 / \%$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.98039216 | 0.97799511 | 0.97560976 | 0.97323601 | 1 |
| 2 | 1.94156094 | 1.93446955 | 1.92742415 | 1.92042434 | 2 |
| 3 | 2.88388327 | 2.86989687 | 2.85602356 | 2.84226213 | 3 |
| 4 | 3.80772870 | 3.78474021 | 3.76197421 | 3.73942787 | 4 |
| 5 | 4.71345951 | 4.67945253 | 4.64582850 | 4.61258186 | 5 |
| 6 | 5.60143089 | 5.55447680 | 5.50812536 | 5.46236678 | 6 |
| 7 | 6.47199107 | 6.41024626 | 6.34939060 | 6.28940806 | 7 |
| 8 | 7.32548144 | 7.24718461 | 7.17013717 | 7.09431441 | 8 |
| 9 | 8.16223671 | 8.06570622 | 7.97086553 | 7.87767826 | 9 |
| 10 | 8.98258501 | -8.8662 1635 | 8.75206393 | 8.64007616 | 10 |
| 11 | 9.78684805 | 9.64911134 | 9.51420871 | 9.38206926 | 11 |
| 12 | 10.57534122 | 10.41477882 | 10.25776460 | 10.10420366 | 12 |
| 13 | 11.34837375 | 11.16359787 | 10.98318497 | 10.80701086 | 13 |
| 14 | 12.10624877 | 11.89593924 | 11.69091217 | 11.49100814 | 14 |
| 15 | 12.84926350 | 12.61216551 | 12.38137773 | 12.15669892 | 15 |
| 16 | 13.57770931 | 13.31263131 | 13.05500266 | 12.80457315 | 16 |
| 17 | 14.29187188 | 13.99768343 | 13.71219772 | 13.43510769 | 17 |
| 18 | 14.99203125 | 14.66766106 | 14.35336363 | 14.04876661 | 18 |
| 19 | 15.67846201 | 15.32289590 | 14.97889134 | 14.64600157 | 19 |
| 20 | 16.35143334 | 15.96371237 | 15.58916229 | 15.22725213 | 20 |
| 21 | 17.01120916 | 16.59042775 | 16.18454857 | 15.79294612 | 21 |
| 22 | 17.65804820 | 17.20335232 | 16.76541324 | 16.34349987 | 22 |
| 23 | 18.29220412 | 17.80278955 | 17.33211048 | 16.87931861 | 23 |
| 24 | 18.91392560 | 18.38903624 | 17.88498583 | 17.40079670 | 24 |
| 25 | 19.52345647 | 18.96238263 | 18.42437642 | 17.90831795 | 25 |
| 26 | 20.12103576 | 19.52311260 | 18.95061114 | 18.40225592 | 26 |
| 27 | 20.70689780 | 20.07150376 | 19.46401087 | 18.88297413 | 27 |
| 28 | 21.28127236 | 20.60782764 | 19.96488866 | 19.35082640 | 28 |
| 29 | 21.84438466 | 21.13234977 | 20.45354991 | 19.80615708 | 29 |
| 30 | 22.39645555 | 21.64532985 | 20.93029259 | 20.24930130 | 30 |
| 31 | 22.93770152 | 22.14702186 | 21.39540741 | 20.68058520 | 31 |
| 32 | 23.46833482 | 22.63767419 | 21.84917796 | 21.10032623 | 32 |
| 33 | 23.98856355 | 23.11752977 | 22.29188094 | 21.50883332 | 33 |
| 34 | 24.49859172 | 23.58682618 | 22.72378628 | 21.90640712 | 34 |
| 35 | 24.99861933 | 24.04579577 | 23.14515734 | 22.29334026 | 35 |
| 36 | 25.48884248 | 24.49466579 | 23.55625107 | 22.66991753 | 36 |
| 37 | 25.96945341 | 24.93365848 | 23.95731812 | 23.03641609 | 37 |
| 38 | 26.44064060 | 25.36299118 | 24.34860304 | 23.39310568 | 38 |
| 39 | 26.90258883 | 25.78287646 | 24.73034443 | 23.74024884 | 39 |
| 40 | 27.35547924 | 26.19352221 | 25.10277505 | 24.07810106 | 40 |
| 41 | 27.79948945 | 26.59513174 | 25.46612200 | 24.40691101 | 41 |
| 42 | 28.23479358 | 26.98790390 | 25.82060683 | 24.72692069 | 42 |
| 43 | 28.66156233 | 27.37203316 | 26.16644569 | 25.03836563 | 43 |
| 44 | 29.07996307 | 27.74770969 | 26.50384945 | 25.34147507 | 44 |
| 45 | 29.49015987 | 28.11511950 | 26.83302386 | 25.63647209 | 45 |
| 46 | 29.89231360 | 28.47444450 | 27.15416962 | 25.92357381 | 46 |
| 47 | 30.28658196 | 28.82586259 | 27.46748255 | 26.20299154 | 47 |
| 48 | 30.67311957 | 29.16954777 | 27.77315371 | 26.47493094 | 48 |
| 49 | 31.05207801 | 29.50567019 | 28.07136947 | 26.73959215 | 49 |
| 50 | 31.42360589 | 29.83439627 | 28.36231168 | 26.99716998 | 50 |

Present Value of 1 per Annum at Compound Interest
TABLE IV. $\quad a_{\bar{n}}=\left(1-v^{n}\right) / i$

| n | $2 \%$ | $2 \%$ | $2 \%$ | $2^{3} \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 31.78784892 | 30.15588877 | 28.64615774 | 27.24785400 | 51 |
| 52 | 32.14494992 | 30.47030687 | 28.92308072 | 27.49182871 | 52 |
| 53 | 32.49504894 | 30.77780623 | 29.19324948 | 27.72927368 | 53 |
| 54 | 32.83828327 | 31.07853910 | 29.45682876 | 27.96036368 | 54 |
| 55 | 33.17478752 | 31.37265438 | 29.71397928 | 28.18526879 | 55 |
| 56 | 33.50469365 | 31.66029768 | 29.96485784 | 28.40415454 . | 56 |
| 57 | 33.82813103 | 31.94161142 | 30.20961740 | 28.61718203 | 57 |
| 58 | 34.14522650 | 32.21673489 | 30.44840722 | 28.82450806 | 58 |
| 59 | 34.45610441 | 32.48580429 | 30.68137290 | 29.02628522 | 59 |
| 60 | 34.76088668 | 32.74895285 | 30.90865649 | 29.22266201 | 60 |
| 61 | 35.05969282 | 33.00631086 | 31.13039657 | 29.41378298 | 61 |
| 62 | 35.35264002 | 33.25800573 | 31.34672836 | 29.59978879 | 62 |
| 63 | 35.63984316 | 33.50416208 | 31.55778377 | 29.78081634 | 63 |
| 64 | 35.92141486 | 33.74490179 | 31.76369148 | 29.95699887 | 64 |
| 65 | 36.19746555 | 33.98034405 | 31.96457705 | 30.12846605 | 65 |
| 66 | 36.46810348 | 34.21060543 | 32.16056298 | 30.29534409 | 66 |
| 67 | 36.73343478 | 34.43579993 | 32.35176876 | 30.45775581 | 67 |
| 68 | 36.99356351 | 34.65603905 | 32.53831099 | 30.61582074 | 68 |
| 69 | 37.24859168 | 34.87143183 | 32.72030340 | 30.76965522 | 69 |
| 70 | 37.49861929 | 35.08208492 | 32.89785698 | 30.91937247 | 70 |
| 71 | 37.74374441 | 35.28810261 | 33.07107998 | 31.06508270 | 71 |
| 72 | 37.98406314 | 35.48958691 | 33.24007803 | 31.20689314 | 72 |
| 73 | 38.21966975 | 35.68663756 | 33.40495417 | 31.34490816 | 73 |
| 74 | 38.45065662 | 35.87935214 | 33.56580895 | 31.47922936 | 74 |
| 75 | 38.67711433 | 36.06782605 | 33.72274044 | 31.60995558 | 75 |
| 76 | 38.89913170 | 36.25215262 | 33.87584433 | 31.73718304 | 76 |
| 77 | 39.11679578 | 36.43242310 | 34.02521398 | 31.86100540 | 77 |
| 78 | 39.33019194 | 36.60872675 | 34.17094047 | 31.98151377 | 78 |
| 79 | 39.53940386 | 36.78115085 | 34.31311265 | 32.09879685 | 79 |
| 80 | 39.74451359 | 36.94978079 | 34.45181722 | 32.21294098 | 80 |
| 81 | 39.94560156 | 37.11470004 | 34.58713875 | 32.32403015 | 81 |
| 82 | 40.14274663 | 37.27599026 | 34.71915976 | 32.43214613 | 82 |
| 83 | 40.33602611 | 37.43373130 | 34.84796074 | 32.53736850 | 83 |
| 84 | 40.52551579 | 37.58800127 | 34.97362023 | 32.63977469 | 84 |
| 85 | 40.71128999 | 37.73887655 | 35.09621486 | 32.73944009 | 85 |
| 86 | 40.89342156 | 37.88643183 | 35.21581938 | 32.83643804 | 86 |
| 87 | 41.07198192 | 38.03074018 | 35.33250671 | 32.93083994 | 87 |
| 88 | 41.24704110 | 38.17187304 | 35.44634801 | 33.02271527 | 88 |
| 89 | 41.41866774 | 38.30990028 | 35.55741269 | 33.11213165 | 89 |
| 90 | 41.58692916 | 38.44489025 | 35.66576848 | 33.19915489 | 90 |
| 91 | 41.75189133 | 38.57690978 | 35.77148144 | 33.28384905 | 91 |
| 92 | 41.91361895 | 38.70602423 | 35.87461604 | 33.36627644 | 92 |
| 93 | 42.07217545 | 38.83229754 | 35.97523516 | 33.44649776 | 93 |
| 94 | 42.22762299 | 38.95579221 | 36.07340016 | 33.52457202 | 94 |
| 95 | 42.38002254 | 39.07656940 | 36.16917089 | 33.60055671 | 9.5 |
| 96 | 42.52943386 | 39.19468890 | 36.26260574 | 33.67450775 | 96 |
| 97 | 42.67591555 | 39.31020920 | 36.35376170 | 33.74647956 | 97 |
| 98 | 42.81952505 | 39.42318748 | 36.44269434 | 33.81652512 | 98 |
| 99 | 42.96031867 | 39.53367968 | 36.52945790 | 33.88469598 | 99 |
| 100 | 43.09835164 | 39.64174052 | 36.61410526 | 33.95104232 | 100 |

Present Value of 1 per Annum at Compound Interest

TABLE IV.

$$
\alpha_{n}=\left(1-v^{n}\right) i
$$

| $n$ | $3 \%$ | 312\% | $4 \%$ | $412{ }^{\text {c }}$ c | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.97087379 | 0.96618357 | 0.96153846 | 0.95693780 | 1 |
| 2 | 1.91346970 | 1.89969428 | 1.88609467 | 1.87266775 | 2 |
| 3 | 2.82861135 | 2.80163698 | 2.77509103 | 2.74896435 | 3 |
| 4 | 3.71709840 | 3.67307921 | 3.62989522 | 3.58752570 | 4 |
| 5 | 4.57970719 | 4.51505238 | 4.45182233 | 4.38997674 | 5 |
| 6 | 5.41719144 | 5.32855302 | 5.24213686 | 5.15787248 | 6 |
| 7 | 6.23028296 | 6.11454398 | 6.00205467 | 5.89270094 | 7 |
| 8 | 7.01969219 | 6.87395554 | 6.73274487 | 6.59588607 | 8 |
| 9 | 7.78610892 | 7.60768651 | 7.43533161 | 7.26879050 | 9 |
| 10 | 8.53020284 | 8.31660532 | 8.11089578 | 7.91271818 | 10 |
| 11 | 9.25262411 | 9.00155104 | 8.76047671 | 8.52891692 | 11 |
| 12 | 9.95400399 | 9.66333433 | 9.38507376 | 9.11858078 | 12 |
| 13 | 10.63495533 | 10.30273849 | 9.98564785 | 9.68285242 | 13 |
| 14 | 11.29607314 | 10.92052028 | 10.56312293 | 10.22282528 | 14 |
| 15 | 11.93793509 | 11.51741090 | 11.11838743 | 10.73954573 | 15 |
| 16 | 12.56110203 | 12.09411681 | 11.65229561 | 11.23401505 | 16 |
| 17 | 13.16611847 | 12.65132059 | 12.16566885 | 11.70719143 | 17 |
| 18 | 13.75351308 | 13.18968173 | 12.65929697 | 12.15999180 | 18 |
| 19 | 14.32379911 | 13.70983742 | 13.13393940 | 12.59329359 | 19 |
| 20 | 14.87747486 | 14.21240330 | 13.59032634 | 13.00793645 | 20 |
| 21 | 15.41502414 | 14.69797420 | 14.02915995 | 13.40472388 | 21 |
| 22 | 15.93691664 | 15.16712484 | 14.45111533 | 13.78442476 | 22 |
| 23 | 16.44360839 | 15.62041047 | 14.85684167 | 14.14777489 | 23 |
| 24 | 16.93554212 | 16.05836760 | 15.24696314 | 14.49547837 | 24 |
| 25 | 17.41314769 | 16.48151459 | 15.62207994 | 14.82820896 | 25 |
| 26 | 17.87684242 | 16.89035226 | 15.98276918 | 15.14661145 | 26 |
| 27 | 18.32703147 | 17.28536451 | 16.32958575 | 15.45130282 | 27 |
| 28 | 18.76410823 | 17.66701885 | 16.66306322 | 15.74287351 | 28 |
| 29 | 19.18845459 | 18.03576700 | 16.98371463 | 16.02188853 | 29 |
| 30 | 19.60044135 | 18.39204541 | 17.29203330 | 16.28888854 | 30 |
| 31 | 20.00042849 | 18.73627576 | 17.58849356 | 16.54439095 | 31 |
| 32 | 20.38876553 | 19.06886547 | 17.87355150 | 16.78889086 | 32 |
| 33 | 20.76579178 | 19.39020818 | 18.14764567 | 17.02286207 | 33 |
| 34 | 21.13183668 | 19.70068423 | 18.41119776 | 17.24675796 | 34 |
| 35 | 21.48722007 | 20.00066110 | 18.66461323 | 17.46101240 | 35 |
| 36 | 21.83225250 | 20.29049381 | 18.90828195 | 17.66604058 | 36 |
| 37 | 22.16723544 | 20.57052542 | 19.14257880 | 17.86223979 | 37 |
| 38 | 22.49246159 | 20.84108736 | 19.36786423 | 18.04999023 | 38 |
| 39 | 22.80821513 | 21.10249987 | 19.58448484 | 18.22965572 | 39 |
| 40 | 23.11477197 | 21.35507234 | 19.79277388 | 18.40158442 | 40 |
| 41 | 23.41239997 | 21.59910371 | 19.99305181 | 18.56610949 | 41 |
| 42 | 23.70135920 | 21.83488281 | 20.18562674 | 18.72354975 | 42 |
| 43 | 23.98190213 | 22.06268870 | 20.37079494 | 18.87421029 | 43 |
| 44 | 24.25427392 | 22.28279102 | 20.54884129 | 19.01838305 | 44 |
| 45 | 24.51871254 | 22.49545026 | 20.72003970 | 19.15634742 | 45 |
| 46 | 24.77544907 | 22.70091813 | 20.88465356 | 19.28837074 | 46 |
| 47 | 25.02470783 | 22.89943780 | 21.04293612 | 19.41470884 | 47 |
| 48 | 25.26670664 | 23.09124425 | 21.19513088 | 19.53560654 | 48 |
| 49 | 25.50165693 | 23.27656450 | 21.34147200 | 19.65129813 | 49 |
| 50 | 25.72976401 | 23.45561787 | 21.48218462 | 19.76200778 | 50 |

## Present Value of 1 per Annum at Compound Interest

TABLE IV. . $a_{\bar{n}}=\left(1-v^{n}\right) / i$

| n | $3 \%$ | $3 \%$ | $4 \%$ | $4 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 25.95122719 | 23.62861630 | 21.61748521 | 19.86795003 | 51 |
| 52 | 26.16623999 | 23.79576454 | 21.74758193 | 19.96933017 | 52 |
| 53 | 26.37499028 | 23.95726043 | 21.87267493 | 20.06634466 | 53 |
| 54 | 26.57766047 | 24.11329510 | 21.99295667 | 20.15918149 | 54 |
| 55 | 26.77442764 | 24.26405323 | 22.10861218 | 20.24802057 | 55 |
| 56 | 26.96546373 | 24.40971327 | 22.21891940 | 20.33303404 | 56 |
| 57 | 27.15093566 | 24.55044760 | 22.32674943 | 20.41438664 | 57 |
| 58 | 27.33100549 | 24.68642281 | 22.42956676 | 20.49223602 | 58 |
| 59 | 27.50583058 | 24.81779981 | 22.52842957 | 20.56673303 | 59 |
| 60 | 27.67556367 | 24.94473412 | 22.62348997 | 20.63802204 | 60 |
| 61 | 27.84035307 | 25.06737596 | 22.71489421 | 20.70624118 | 61 |
| 62 | 28.00034279 | 25.18587049 | 22.80278289 | 20.77152266 | 62 |
| 63 | 28.15567261 | 25.30035796 | 22.88729124 | 20.83399298 | 63 |
| 64 | 28.30647826 | 25.41097388 | 22.96854927 | 20.89377319 | 64 |
| 65 | 28.45289152 | 25.51784916 | 23.04668199 | 20.95097913 | 65 |
| 66 | 28.59504031 | 25.62111030 | 23.12180961 | 21.00572165 | 66 |
| 67 | 28.73304884 | 25.72087951 | 23.19404770 | 21.05810684 | 67 |
| 68 | 28.86703771 | 25.81727489 | 23.26350740 | 21.10823621 | 68 |
| 69 | 28.99712399 | 25.91041052 | 23.33029558 | 21.15620690 | 69 |
| 70 | 29.12342135 | 26.00039664 | 23.39451498 | 21.20211187 | 70 |
| 71 | 29.24604015 | 26.08733975 | 23.45626440 | 21.24604007 | 71 |
| 72 | 29.36508752 | 26.17134275 | 23.51563885 | 21.28807662 | 72 |
| 73 | 29.48066750 | 26.25250508 | 23.57272966 | 21.32830298 | 73 |
| 74 | 29.59288106 | 26.33092278 | 23.62762468 | 21.36679711 | 74 |
| 75 | 29.70182628 | 26.40668868 | 23.68040834 | 21.40363360 | 75 |
| 76 | 29.80759833 | 26.47989244 | 23.73116187 | 21.43888383 | 76 |
| 77 | 29.91028964 | 26.55062072 | 23.77996333 | 21.47261611 | 77 |
| 78 | 30.00998994 | 26.61895721 | 23.82688782 | 21.50489579 | 78 |
| 79 | 30.10678635 | 26.68498281 | 23.87200752 | 21.53578545 | 79 |
| 80 | 30.20076345 | 26.74877567 | 23.91539185 | 21.56534493 | 80 |
| 81 | 30.29200335 | 26.81041127 | 23.95710754 | 21.59363151 | 81 |
| 82 | 30.38058577 | 26.86996258 | 23.99721879 | 21.62070001 | 82 |
| 83 | 30.46658813 | 26.92750008 | 24.03578730 | 21.64660288 | 83 |
| 84 | 30.55008556 | 26.98309186 | 24.07287240 | 21.67139032 | 84 |
| 85 | 30.63115103 | 27.03680373 | 24.10853116 | 21.69511035 | 85 |
| 86 | 30.70985537 | 27.08869926 | 24.14281842 | 21.71780895 | 86 |
| 87 | 30.78626735 | 27.13883986 | 24.17578694 | 21.73953009 | 87 |
| 88 | 30.86045374 | 27.18728489 | 24.20748745 | 21.76031588 | 88 |
| 89 | 30.93247936 | 27.23409168 | 24.23796870 | 21.78020658 | 89 |
| 90 | 31.00240714 | 27.27931564 | 24.26727759 | 21.79924075 | 90 |
| 91 | 31.07029820 | 27.32301028 | 24.29545923 | 21.81745526 | 91 |
| 92 | 31.13621184 | 27.36522732 | 24.32255695 | 21.83488542 | 92 |
| 93 | 31.20020567 | 27.40601673 | 24.34861245 | 21.85156499 | 93 |
| 94 | 31.26233560 | 27.44542680 | 24.37366582 | 21.86752631 | 94 |
| 95 | 31.32265592 | 27.48350415 | 24.39775559 | 21.88280030 | 95 |
| 96 | 31.38121934 | 27.52029387 | 24.42091884 | 21.89741655 | 96 |
| 97 | 31.43807703 | 27.55583948 | 24.44319119 | 21.91140340 | 97 |
| 98 | 31.49327867 | 27.59018308 | 24.46460692 | 21.92478794 | 98 |
| 99 | 31.54687250 | 27.62336529 | 24.48519896 | 21.93759612 | 99 |
| 100 | 31.59890534 | 27.65542540 | 24.50499900 | 21.94985274 | 100 |

## Present Value of 1 per Annum at Compound Interest

TABLE IV.

$$
a_{\bar{n}}=\left(1-r^{n}\right), i
$$

| $n$ | $5 \%$ | $5 \%$ | $6 \%$ | $7 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.95238095 | 0.94786730 | 0.94339623 | 0.93457944 | 1 |
| 2 | 1.85941043 | 1.84631971 | 1.83339267 | 1.80801817 | 2 |
| 3 | 2.72324803 | 2.69793338 | 2.67301195 | 2.62431604 | 3 |
| 4 | 3.54595050 | 3.50515012 | 3.46510561 | 3.38721126 | 4 |
| 5 | 4.32947667 | 4.27028448 | 4.21236379 | 4.10019744 | 5 |
| 6 | 5.07569206 | 4.99553031 | 4.91732433 | 4.76653966 | 6 |
| 7 | 5.78637340 | 5.68296712 | 5.58238144 | 5.38928940 | 7 |
| 8 | 6.46321276 | 6.33456599 | 6.20979381 | 5.97129851 | 8 |
| 9 | 7.10782168 | 6.95219525 | 6.80169227 | 6.51523225 | 9 |
| 10 | 7.72173493 | 7.53762583 | 7.36008705 | 7.02358155 | 10 |
| 11 | 8.30641422 | 8.09253633 | 7.88687458 | 7.49867435 | 11 |
| 12 | 8.86325164 | 8.61851785 | 8.38384394 | 7.94268631 | 12 |
| 13 | 9.39357299 | 9.11707853 | 8.85268296 | 8.35765075 | 13 |
| 14 | 9.89864094 | 9.58964790 | 9.29498393 | 8.74546800 | 14 |
| 15 | 10.37965804 | 10.03758094 | 9.71224899 | 9.10791402 | 15 |
| 16 | 10.83776956 | 10.46216203 | 10.10589527 | 9.44664861 | 16 |
| 17 | 11.27406625 | 10.86460856 | 10.47725969 | 9.76322300 | 17 |
| 18 | 11.68958690 | 11.24607447 | 10.82760348 | 10.05908692 | 18 |
| 19 | 12.08532086 | 11.60765352 | 11.15811649 | 10.33559525 | 19 |
| 20 | 12.46221034 | 11.95038249 | 11.46992122 | 10.59401426 | 20 |
| 21 | 12.82115271 | 12.27524406 | 11.76407662 | 10.83552734 | 21 |
| 22 | 13.16300258 | 12.58316973 | 12.04158172 | 11.06124051 | 22 |
| 23 | 13.48857388 | 12.87504240 | 12.30337898 | 11.27218739 | 23 |
| 24 | 13.79864179 | 13.15169895 | 12.55035753 | 11.46933401 | 24 |
| 25 | 14.09394457 | 13.41393266 | 12.78335616 | 11.65358319 | 25 |
| 26 | 14.37518530 | 13.66249541 | 13.00316619 | 11.82577868 | 26 |
| 27 | 14.64303362 | 13.89809991 | 13.21053414 | 11.98670905 | 27 |
| 28 | 14.89812726 | 14.12142172 | 13.40616428 | 12.13711126 | 28 |
| 29 | 15.14107358 | 14.33310116 | 13.59072102 | 12.27767408 | 29 |
| 30 | 15.37245103 | 14.53374517 | 13.76483115 | 12.40904119 | 30 |
| 31 | 15.59281050 | 14.72392907 | 13.92908599 | 12.53181420 | 31 |
| 32 | 15.80267667 | 14.90419817 | 14.08404339 | 12.64655533 | 32 |
| 33 | 16.00254921 | 15.07506936 | 14.23022961 | 12.75379003 | 33 |
| 34 | 16.19290401 | 15.23703257 | 14.36814114 | 12.85400937 | 34 |
| 35 | 16.37419429 | 15.39055220 | 14.49824636 | 12.94767231 | 35 |
| 36 | 16.54685171 | 15.53606843 | 14.62098713 | 13.03520777 | 36 |
| 37 | 16.71128734 | 15.67399851 | 14.73678031 | 13.11701661 | 37 |
| 38 | 16.86789271 | 15.80473793 | 14.84601916 | 13.19347346 | 38 |
| 39 | 17.01704067 | 15.92866154 | 14.94907468 | 13.26492847 | 39 |
| 40 | 17.15908635 | 16.04612469 | 15.04629687 | 13.33170885 | 40 |
| 41 | 17.29436796 | 16.15746416 | 15.13801592 | 13.39412042 | 41 |
| 42 | 17.42320758 | 16.26299920 | 15.22454332 | 13.45244900 | 42 |
| 43 | 17.54591198 | 16.36303242 | 15.30617294 | 13.50696168 | 43 |
| 44 | 17.66277331 | 16.45785063 | 15.38318202 | 13.55790811 | 44 |
| 45 | 17.77406982 | 16.54772572 | 15.45583209 | 13.60552160 | 45 |
| 46 | 17.88006650 | 16.63291537 | 15.52436990 | 13.65002019 | 46 |
| 47 | 17.98101571 | 16.71366386 | 15.58902821 | 13.69160765 | 47 |
| 48 | 18.07715782 | 16.79020271 | 15.65002661 | 13.73047444 | 48 |
| 49 | 18.16872173 | 16.86275139 | 15.70757227 | 13.77679855 | 49 |
| 50 | 18.25592546 | 16.93151790 | 15.76186064 | 13.80074630 | 50 |

Present Value of 1 Per Annum at Compound Interest
TABLE IV.

$$
a_{\bar{n}}=\left(1-v^{n}\right) i
$$

| n | $5 \%$ | $5{ }^{1} \%$ | $6_{0}$ | $7_{C}$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 18.33897663 | 16.99669943 | 15.81307607 | 13.83247318 | 51 |
| 52 | 18.41807298 | 17.05848287 | 15.86139252 | 13.86212446 | 52 |
| 53 | 18.49340284 | 17.11704538 | 15.90697408 | 13.88983594 | 53 |
| 54 | 18.56514556 | 17.17255486 | 15.94997554 | 13.91573452 | 54 |
| 55 | 18.63347196 | 17.22517048 | 15.99054297 | 13.93993881 | 55 |
| 56 | 18.69854473 | 17.27504311 | 16.02881412 | 13.96255964 | 56 |
| 57 | 18.76051879 | 17.32231575 | 16.06491898 | 13.98370059 | 57 |
| 58 | 18.81954170 | 17.36712393 | 16.09898017 | 14.00345850 | 58 |
| 59 | 18.87575400 | 17.40959614 | 16.13111337 | 14.02192383 | 59 |
| 60 | 18.92928952 | 17.44985416 | 16.16142771 | 14.03918115 | 60 |
| 61 | 18.98027574 | 17.48801343 | 16.19002614 | 14.05530949 | 61 |
| 62 | 19.02883404 | 17.52418334 | 16.21700579 | 14.07038270 | 62 |
| 63 | 19.07508003 | 17.55846762 | 16.24245829 | 14.08446981 | 63 |
| 64 | 19.11912384 | 17.59096457 | 16.26647009 | 14.09763534 | 64 |
| 65 | 19.16107033 | 17.62176737 | 16.28912272 | 14.10993957 | 65 |
| 66 | 19.20101936 | 17.65096433 | 16.31049314 | 14.12143885 | 66 |
| 67 | 19.23906606 | 17.67863917 | 16.33065390 | 14.13218584 | 67 |
| 68 | 19.27530101 | 17.70487125 | 16.34967349 | 14.14222976 | 68 |
| 69 | 19.30981048 | 17.72973579 | 16.36761650 | 14.15161660 | 69 |
| 70 | 19.34267665 | 17.75330406 | 16.38454387 | 14.16038934 | 70 |
| 71 | 19.37397776 | 17.77564366 | 16.40051308 | 14.16858817 | 71 |
| 72 | 19.40378834 | 17.79681864 | 16.41557838 | 14.17625063 | 72 |
| 73 | 19.43217937 | 17.81688970 | 16.42979093 | 14.18341180 | 73 |
| 74 | 19.45921845 | 17.83591441 | 16.44319899 | 14.19010449 | 74 |
| 75 | 19.48496995 | 17.85394731 | 16.45584810 | 14.19635933 | 75 |
| 76 | 19.50949519 | 17.87104010 | 16.46778123 | 14.20220498 | 76 |
| 77 | 19.53285257 | 17.88724180 | 16.47903889 | 14.20766821 | 77 |
| 78 | 19.55509768 | 17.90259887 | 16.48965933 | 14.21277403 | 78 |
| 79 | 19.57628351 | 17.91715532 | 16.49967862 | 14.21754582 | 79 |
| 80 | 19.59646048 | 17.93095291 | 16.50913077 | 14.22200544 | 80 |
| 81 | 19.61567665 | 17.94403120 | 16.51804790 | 14.22617331 | 81 |
| 82 | 19.63397776 | 17.95642768 | 16.52646028 | 14.23006851 | 82 |
| 83 | 19.65140739 | 17.96817789 | 16.53439649 | 14.23370889 | 83 |
| 84 | 19.66800704 | 17.97931554 | 16.54188348 | 14.23711111 | 84 |
| 85 | 19.68381623 | 17.98987255 | 16.54894668 | 14.24029076 | 85 |
| 86 | 19.69887260 | 17.99987919 | 16.55561008 | 14.24326239 | 86 |
| 87 | 19.71321200 | 18.00936416 | 16.56189630 | 14.24603962 | 87 |
| 88 | 19.72686857 | 18.01835466 | 16.56782670 | 14.24863516 | 88 |
| 89 | 19.73987483 | 18.02687645 | 16.57342141 | 14.25106089 | 89 |
| 90 | 19.75226174 | 18.03495398 | 16.57869944 | 14.25332794 | 90 |
| 91 | 19.76405880 | 18.04261041 | 16.58367872 | 14.25544667 | 91 |
| 92 | 19.77529410 | 18.04986769 | 16.58837615 | 14.25742680 | 92 |
| 93 | 19.78599438 | 18.05674662 | 16.59280769 | 14.25927738 | 93 |
| 94 | 19.79618512 | 18.06326694 | 16.59698839 | 14.26100690 | 94 |
| 95 | 19.80589059 | 18.06944734 | 16.60093244 | 14.26262327 | 95 |
| 96 | 19.81513390 | 18.07530553 | 16.60465325 | 14.26413390 | 96 |
| 97 | 19.82393705 | 18.08085833 | 16.60816344 | 14.26554570 | 97 |
| 98 | 19.83232100 | 18.08612164 | 16.61147494 | 14.26686514 | 98 |
| 99 | 19.84030571 | 18.09111055 | 16.61459900 | 14.26809826 | 99 |
| 100 | 19.84791020 | 18.09583939 | 16.61754623 | 14.26925071 | 100 |

Annuity Whose Present Value at Compound Interest Is 1
TABLE V.

$$
a_{\frac{-1}{n}}=i\left(1-v^{n}\right)
$$

| n | $1{ }_{C}^{C}$ | $1{ }^{1} \mathrm{C}$ | 11.2 | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.01000000 | 1.01250000 | 1.01500000 | 1.01750000 | 1 |
| 2 | 0.50751244 | 0.50939441 | 0.51127792 | 0.51316295 | 2 |
| 3 | 0.34002211 | 0.34170117 | 0.34338296 | 0.34506746 | 3 |
| 4 | 0.25628109 | 0.25786102 | 0.25944478 | 0.26103237 | 4 |
| 5 | 0.20603980 | 0.20756211 | 0.20908932 | 0.21062142 | 5 |
| 6 | 0.17254837 | 0.17403381 | 0.17552521 | 0.17702256 | 6 |
| 7 | 0.14862828 | 0.15008872 | 0.15155616 | 0.15303059 | 7 |
| 8 | 0.13069029 | 0.13213314 | 0.13358402 | 0.13504292 | 8 |
| 9 | 0.11674036 | 0.11817055 | 0.11960982 | 0.12105813 | 9 |
| 10 | 0.10558208 | 0.10700307 | 0.10843418 | 0.10987534 | 10 |
| 11 | 0.09645408 | 0.09786839 | 0.09929384 | 0.10073038 | 11 |
| 12 | 0.08884879 | 0.09025831 | 0.09167999 | 0.09311377 | 12 |
| 13 | 0.08241482 | 0.08382100 | 0.08524036 | 0.08667283 | 13 |
| $14^{*}$ | 0.07690117 | 0.07830515 | 0.07972332 | 0.08115562 | 14 |
| 15 | 0.07212378 | 0.07352646 | 0.07494436 | 0.07637739 | 15 |
| 16 | 0.06794460 | 0.06934672 | 0.07076508 | 0.07219958 | 16 |
| 17 | 0.06425806 | 0.06566023 | 0.06707966 | 0.06851623 | 17 |
| 18 | 0.06098205 | 0.06238479 | 0.06380578 | 0.06524492 | 18 |
| 19 | 0.05805175 | 0.05945548 | 0.06087847 | 0.06232061 | 19 |
| 20 | 0.05541531 | 0.05682039 | 0.05824574 | 0.05969122 | 20 |
| 21 | 0.05303075 | 0.05443748 | 0.05586550 | 0.05731464 | 21 |
| 22 | 0.05086372 | 0.05227238 | 0.05370331 | 0.05515638 | 22 |
| 23 | 0.04888584 | 0.05029666 | 0.05173075 | 0.05318796 | 23 |
| 24 | 0.04707347 | 0.04848665 | 0.04992410 | 0.05138565 | 24 |
| 25 | 0.04540675 | 0.04682247 | 0.04826345 | 0.04972952 | 25 |
| 26 | 0.04386888 | 0.04528729 | 0.04673196 | 0.04820269 | 26 |
| 27 | 0.04244553 | 0.04386677 | 0.04531527 | 0.04679079 | 27 |
| 28 | 0.04112444 | 0.04254863 | 0.04400108 | 0.04548151 | 28 |
| 29 | 0.03989502 | 0.04132228 | 0.04277878 | 0.04426424 | 29 |
| 30 | 0.03874811 | 0.04017854 | 0.04163919 | 0.04312975 | 30 |
| 31 | 0.03767573 | 0.03910942 | 0.04057430 | 0.04207005 | 31 |
| 32 | 0.03667089 | 0.03810791 | 0.03957710 | 0.04107812 | 32 |
| 33 | 0.03572744 | 0.03716786 | 0.03864144 | 0.04014779 | 33 |
| 34 | 0.03483997 | 0.03628387 | 0.03776189 | 0.03927363 | 34 |
| 35 | 0.03400368 | 0.03545111 | 0.03693363 | 0.03845082 | 35 |
| 36 | 0.03321431 | 0.03466533 | 0.03615240 | 0.03767507 | 36 |
| 37 | 0.03246805 | 0.03392270 | 0.03541437 | 0.03694257 | 37 |
| 38 | 0.03176150 | 0.03321983 | 0.03471613 | 0.03624990 | 38 |
| 39 | 0.03109160 | 0.03255365 | 0.03405463 | 0.03559399 | 39 |
| 40 | 0.03045560 | 0.03192141 | 0.03342710 | 0.03497209 | 40 |
| 41 | 0.02985102 | 0.03132063 | 0.03283106 | 0.03438170 | 41 |
| 42 | 0.02927563 | 0.03074906 | 0.03226426 | 0.03382057 | 42 |
| 43 | 0.02872737 | 0.03020466 | 0.03172465 | 0.03328666 | 43 |
| 44 | 0.02820441 | 0.02968557 | 0.03121038 | 0.03277810 | 44 |
| 45 | 0.02770505 | 0.02919012 | 0.03071976 | 0.03229321 | 45 |
| 46 | 0.02722775 | 0.02871675 | 0.03025125 | 0.03183043 | 46 |
| 47 | 0.02677111 | 0.02826406 | 0.02980342 | 0.03138836 | 47 |
| 48 | 0.02633384 | 0.02783075 | 0.02937500 | 0.03096569 | 48 |
| 49 | 0.02591474 | 0.02741563 | 0.02896478 | 0.03056124 | 49 |
| 50 | 0.02551273 | 0.02701763 | 0.02857168 | 0.03017391 | 50 |

Annuity Whose Present Value at Compound Interest Is I
TABLE V.
$a_{\frac{-1}{n}}^{-1}=i\left(1-r^{\prime \prime}\right)$

| $n$ | $1{ }_{c}$ | 1140 | 112\% | 13.9 | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.02512680 | 0.02663571 | 0.02819469 | 0.02980269 | 51 |
| 52 | 0.02475603 | 0.02626897 | 0.02783287 | 0.02944665 | 52 |
| 53 | 0.02439956 | 0.02591653 | 0.02748537 | 0.02910492 | 53 |
| 54 | 0.02405658 | 0.02557760 | 0.02715138 | 0.02877672 | 54 |
| 55 | 0.02372637 | 0.02525145 | 0.02683018 | 0.02846129 | 55 |
| 56 | 0.02340824 | 0.02493739 | 0.02652106 | 0.02815795 | 56 |
| 57 | 0.02310156 | 0.02463478 | 0.02622341 | 0.02786606 | 57 |
| 58 | 0.02280573 | 0.02434303 | 0.02593661 | 0.02758503 | 58 |
| 59 | 0.02252020 | 0.02406158 | 0.02566012 | 0.02731430 | 59 |
| 60 | 0.02224445 | 0.02378993 | 0.02539343 | 0.02705336 | 60 |
| 61 | 0.02197800 | 0.02352758 | 0.02513604 | 0.02680172 | 61 |
| 62 | 0.02172041 | 0.02327410 | 0.02488751 | 0.02655892 | 62 |
| 63 | 0.02147125 | 0.02302904 | 0.02464741 | 0.02632455 | 63 |
| 64 | 0.02123013 | 0.02279203 | 0.02441534 | 0.02609821 | 64 |
| 65 | 0.02099667 | 0.02256268 | 0.02419094 | 0.02587952 | 65 |
| 66 | 0.02077052 | 0.02234065 | 0.02397386 | 0.02566813 | 66 |
| 67 | 0.02055136 | 0.02212560 | 0.02376376 | 0.02546372 | 67 |
| 68 | 0.02033889 | 0.02191724 | 0.02356033 | 0.02526596 | 68 |
| 69 | 0.02013280 | 0.02171527 | 0.02336329 | 0.02507459 | 69 |
| 70 | 0.01993282 | 0.02151941 | 0.02317235 | 0.02488930 | 70 |
| 71 | 0.01973870 | 0.02132941 | 0.02298727 | 0.02470985 | 71 |
| 72 | 0.01955019 | 0.02114501 | 0.02280779 | 0.02453600 | 72 |
| 73 | 0.01936706 | 0.02096600 | 0.02263368 | 0.02436750 | 73 |
| 74 | 0.01918910 | 0.02079215 | 0.02246473 | 0.02420413 | 74 |
| 75 | 0.01901609 | 0.02062325 | 0.02230072 | 0.02404570 | 75 |
| 76 | 0.01884784 | 0.02045910 | 0.02214146 | 0.02389200 | 76 |
| 77 | 0.01868416 | 0.02029953 | 0.02198676 | 0.02374284 | 77 |
| 78 | 0.01852488 | 0.02014435 | 0.02183645 | 0.02359806 | 78 |
| 79 | 0.01836983 | 0.01999341 | 0.02169036 | 0.02345748 | 79 |
| 80 | 0.01821885 | 0.01984652 | 0.02154832 | 0.02332093 | 80 |
| 81 | 0.01807179 | 0.01970356 | 0.02141019 | 0.02318828 | 81 |
| 82 | 0.01792851 | 0.01956437 | 0.02127583 | 0.02305936 | 82 |
| 83 | 0.01778887 | 0.01942881 | 0.02114509 | 0.02293406 | 83 |
| 84 | 0.01765273 | 0.01929675 | 0.02101784 | 0.02281223 | 84 |
| 85 | 0.01751998 | 0.01916808 | 0.02089396 | 0.02269375 | 85 |
| 86 | 0.01739050 | 0.01904267 | 0.02077333 | 0.02257850 | 86 |
| 87 | 0.01726417 | 0.01892041 | 0.02065584 | 0.02246636 | 87 |
| 88 | 0.01714089 | 0.01880119. | 0.02054138 | 0.02235724 | 88 |
| 89 | 0.01702056 | 0.01868490 | 0.02042984 | 0.02225102 | 89 |
| 90 | 0.01690306 | 0.01857146 | 0.02032113 | 0.02214760 | 90 |
| 91 | 0.01678832 | 0.01846076 | 0.02021516 | 0.02204690 | 91 |
| 92 | 0.01667624 | 0.01835271 | 0.02011182 | 0.02194882 | 92 |
| 93 | 0.01656673 | 0.01824724 | 0.02001104 | 0.02185327 | 93 |
| 94 | 0.01645971 | 0.01814425 | 0.01991273 | 0.02176017 | 94 |
| 95 | 0.01635511 | 0.01804366 | 0.01981681 | 0.02166944 | 95 |
| 96 | 0.01625284 | 0.01794540 | 0.01972321 | 0.02158101 | 96 |
| 97 | 0.01615284 | 0.01784941 | 0.01963186 | 0.02149480 | 97 |
| 98 | 0.01605503 | 0.01775560 | 0.01954268 | 0.02141074 | 98 |
| 99 | 0.01595936 | 0.01766391 | 0.01945560 | 0.02132876 | 99 |
| 100 | 0.01586574 | 0.01757428 | 0.01937057 | 0.02124880 | 100 |

Annuity Whose Present Value at Compound Interest Is 1
TABLE V. $\boldsymbol{a}_{n}^{-1}=\boldsymbol{i}\left(\mathbf{1}-\boldsymbol{c}^{n}\right)$

| n | $2 \%$ | 2\% $4 \%$ | $2^{1} \mathrm{C}^{\circ} \mathrm{C}$ | $23 \%$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.02000000 | 1.02250000 | 1.02500000 | 1.02750000 | 1 |
| 2 | 0.51504950 | 0.51693758 | 0.51882716 | 0.52071825 | 2 |
| 3 | 0.34675467. | 0.34844458 | 0.35013717 | 0.35183243 | 3 |
| 4 | 0.26262375 | 0.26421893 | 0.26581788 | 0.26742059 | 4 |
| 5 | 0.21215839 | 0.21370022 | 0.21524686 | 0.21679832 | 5 |
| 6 | 0.17852581 | 0.18003496 | 0.18154997 | 0.18307083 | 6 |
| 7 | 0.15451196 | 0.15600025 | 0.15749543 | 0.15899747 | 7 |
| 8 | 0.13650980 | 0.13798462 | 0.13946735 | 0.14095795 | 8 |
| 9 | 0.12251544 | 0.12398170 | 0.12545689 | 0.12694095 | 9 |
| 10 | 0.11132653 | 0.11278768 | 0.11425876 | 0.11573972 | 10 |
| 11 | 0.10217794 | 0.10363649 | 0.10510596 | 0.10658629 | 11 |
| 12 | 0.09455960 | 0.09601740 | 0.09748713 | 0.09896871 | 12 |
| 13 | 0.08811835 | 0.08957686 | 0.09104827 | 0.09253252 | 13 |
| 14 | 0.08260197 | 0.08406230 | 0.08553653 | 0.08702457 | 14 |
| 15 | 0.07782547 | 0.07928852 | 0.08076646 | 0.08225917 | 15 |
| 16 | 0.07365013 | 0.07511663 | 0.07659899 | 0.07809710 | 16 |
| 17 | 0.06996984 | 0.07144039 | 0.07292777 | 0.07443186 | 17 |
| 18 | 0.06670210 | 0.06817720 | 0.06967008 | 0.07118063 | 18 |
| 19 | 0.06378177 | 0.06526182 | 0.06676062 | 0.06827802 | 19 |
| 20 | 0.06115672 | 0.06264207 | 0.06414713 | 0.06567173 | 20 |
| 21 | 0.05878477 | 0.06027572 | 0.06178733 | 0.06331941 | 21 |
| 22 | 0.05663140 | 0.05812821 | 0.05964661 | 0.06118640 | 22 |
| 23 | 0.05466810 | 0.05617097 | 0.05769638 | 0.05924410 | 23 |
| 24 | 0.05287110 | 0.05438023 | 0.05591282 | 0.05746863 | 24 |
| 25 | 0.05122044 | 0.05273599 | 0.05427592 | 0.05583997 | 25 |
| 26 | 0.04969923 | 0.05122134 | 0.05276875 | 0.05434116 | 26 |
| 27 | 0.04829309 | 0.04982188 | 0.05137687 | 0.05295776 | 27 |
| 28 | 0.04698967 | 0.04852525 | 0.05008793 | 0.05167738 | 28 |
| 29 | 0.04577836 | 0.04732081 | 0.04889127 | 0.05048935 | 29 |
| 30 | 0.04464992 | 0.04619934 | 0.04777764 | 0.04938442 | 30 |
| 31 | 0.04359635 | 0.04515280 | 0.04673900 | 0.04835453 | 31 |
| 32 | 0.04261061 | 0.04417415 | 0.04576831 | 0.04739263 | 32 |
| 33 | 0.04168653 | 0.04325722 | 0.04485938 | 0.04649253 | 33 |
| 34 | 0.04081867 | 0.04239655 | 0.04400675 | 0.04564875 | 34 |
| 35 | 0.04000221 | 0.04158731 | 0.04320558 | 0.04485645 | 35 |
| 36 | 0.03923285 | 0.04082522 | 0.04245158 | 0.04411132 | 36 |
| 37 | 0.03850678 | 0.04010643 | 0.04174090 | 0.04340953 | 37 |
| 38 | 0.03782057 | 0.03942753 | 0.04107012 | 0.04274764 | 38 |
| 39 | 0.03717114 | 0.03878543 | 0.04043615 | 0.04212256 | 39 |
| 40 | 0.03655575 | 0.03817738 | 0.03983623 | 0.04153151 | 40 |
| 41 | 0.03597188 | 0.03760087 | 0.03926786 | 0.04097200 | 41 |
| 42 | 0.03541729 | 0.03705364 | 0.03872876 | 0.04044175 | 42 |
| 43 | 0.03488993 | 0.03653364 | 0.03821688 | 0.03993871 | 43 |
| 44 | 0.03438794 | 0.03603901 | 0.03773037 | 0.03946100 | 44 |
| 45 | 0.03390962 | 0.03556805 | 0.03726752 | 0.03900693 | 45 |
| 46 | 0.03345342 | 0.03511921 | 0.03682676 | 0.03857493 | 48 |
| 47 | 0.03301792 | 0.03469107 | 0.03640669 | 0.03816358 | 47 |
| 48 | 0.03260184 | 0.03428233 | 0.03600599 | 0.03777158 | 48 |
| 49 | 0.03220396 | 0.03389179 | 0.03562348 | 0.03739773 | 49 |
| 50 | 0.03182321 | 0.03351836 | 0.03525806 | 0.03704092 | 50 |

Annuity Whose Present Value at Compound Interest Is 1
TABLE V.

$$
a_{n}^{-1}=i\left(1-v^{n}\right)
$$

| $n$ | $2 \%$ | $2^{1}+8$ | 2\%\% | $2^{3} \cdot{ }_{C}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.03145856 | 0.03316102 | 0.03490870 | 0.03670014 | 51 |
| 52 | 0.03110909 | 0.03281884 | 0.03457446 | 0.03637444 | 52 |
| 53 | 0.03077392 | 0.03249094 | 0.03425449 | 0.03606297 | 53 |
| 54 | 0.03045226 | 0.03217654 | 0.03394799 | 0.03576491 | 54 |
| 55 | 0.03014337 | 0.03187489 | 0.03365419 | 0.03547953 | 55 |
| 56 | 0.02984656 | 0.03158530 | 0.03337243 | 0.03520612 | 56 |
| 57 | 0.02956120 | 0.03130712 | 0.03310204 | 0.03494404 | 57 |
| 58 | 0.02928667 | 0.03103977 | 0.03284244 | 0.03469270 | 58 |
| 59 | 0.02902243 | 0.03078268 | 0.03259307 | 0.03445153 | 59 |
| 60 | 0.02876797 | 0.03053533 | 0.03235340 | 0.03422002 | 60 |
| 61 | 0.02852278 | 0.03029724 | 0.03212294 | 0.03399767 | 61 |
| 62 | 0.02828643 | 0.03006795 | 0.03190126 | 0.03378402 | 62 |
| 63 | 0.02805848 | 0.02984704 | 0.03168790 | 0.03357866 | 63 |
| 64 | 0.02783855 | 0.02963411 | 0.03148249 | 0.03338118 | 64 |
| 65 | 0.02762624 | 0.02942878 | 0.03128463 | 0.03319120 | 65 |
| 66 | 0.02742122 | 0.02923070 | 0.03109398 | 0.03300837 | 66 |
| 67 | 0.02722316 | 0.02903955 | 0.03091021 | 0.03283236 | 67 |
| 68 | 0.02703173 | 0.02885500 | 0.03073300 | 0.03266285 | 68 |
| 69 | 0.02684665 | 0.02867677 | 0.03056206 | 0.03249955 | 69 |
| 70 | 0.02666765 | 0.02850458 | 0.03039712 | 0.03234218 | 70 |
| 71 | 0.02649446 | 0.02833816 | 0.03023790 | 0.03219048 | 71 |
| 72 | 0.02632683 | 0.02817728 | 0.03008417 | 0.03204420 | 72 |
| 73 | 0.02616454 | 0.02802169 | 0.02993568 | 0.03190311 | 73 |
| 74 | 0.02600736 | 0.02787118 | 0.02979222 | 0.03176698 | 74 |
| 75 | 0.02585508 | 0.02772554 | 0.02965358 | 0.03163560 | 75 |
| 76 | 0.02570751 | 0.02758457 | 0.02951956 | 0.03150878 | 76 |
| 77 | 0.02556447 | 0.02744808 | 0.02938997 | 0.03138633 | 77 |
| 78 | 0.02542576 | 0.02731589 | 0.02926463 | 0.03126806 | 78 |
| 79 | 0.02529123 | 0.02718784 | 0.02914338 | 0.03115382 | 79 |
| 80 | 0.02516071 | 0.02706376 | 0.02902605 | 0.03104342 | 80 |
| 81 | 0.02503405 | 0.02694350 | 0.02891248 | 0.03093674 | 81 |
| 82 | 0.02491110 | 0.02682692 | 0.02880254 | 0.03083361 | 82 |
| 83 | 0.02479173 | 0.02671387 | 0.02869608 | 0.03073389 | 83 |
| 84 | 0.02467581 | 0.02660423 | 0.02859298 | 0.03063747 | 84 |
| 85 | 0.02456321 | 0.02649787 | 0.02849310 | 0.03054420 | 85 |
| 86 | 0.02445381 | 0.02639467 | 0.02839633 | 0.03045397 | 86 |
| 87 | 0.02434750 | 0.02629452 | 0.02830255 | 0.03036667 | 87 |
| 88 | 0.02424416 | 0.02619730 | 0.02821165 | 0.03028219 | 88 |
| 89 | 0.02414370 | 0.02610291 | 0.02812353 | 0.03020041 | 89 |
| 90 | 0.02404602 | 0.02601126 | 0.02803809 | 0.03012125 | 90 |
| 91 | 0.02395101 | 0.02592224 | 0.02795523 | 0.03004460 | 91 |
| 92 | 0.02385859 | 0.02583577 | 0.02787486 | 0.02997038 | 92 |
| 93 | 0.02376868 | 0.02575176 | 0.02779690 | 0.02989850 | 93 |
| 94 | 0.02368118 | 0.02567012 | 0.02772126 | 0.02982887 | 94 |
| 95 | 0.02359602 | 0.02559078 | 0.02764786 | 0.02976141 | 95 |
| 96 | 0.02351313 | 0.02551366 | 0.02757662 | 0.02969605 | 96 |
| 97 | 0.02343242 | 0.02543868 | 0.02750747 | 0.02963272 | 97 |
| 98 | 0.02335383 | 0.02536578 | 0.02744034 | 0.02957134 | 98 |
| 99 | 0.02327729 | 0.02529489 | 0.02737517 | 0.02951185 | 99 |
| 100 | 0.02320274 | 0.02522594 | 0.02731188 | 0.02945418 | 100 |

Annuity Whose Present Value at Compound Interest Is 1
TABLEV. $\boldsymbol{a}_{\frac{-1}{n}}^{=1 /\left(1-c^{n}\right)}$

| n | $3 C_{C}$ | $3{ }_{2}^{1}$ | $1 \%$ | 1\% $2 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.03000000 | 1.03500000 | 1.04000000 | 1.04500000 | 1 |
| 2 | 0.52261084 | 0.52640049 | 0.53019608 | 0.53399756 | 2 |
| 3 | 0.35353036 | 0.35693418 | 0.36034854 | 0.36377336 | 3 |
| 4 | 0.26902705 | 0.27225114 | 0.27549005 | 0.27874365 | 4 |
| 5 | 0.21835457 | 0.22148137 | 0.22462711 | 0.22779164 | 5 |
| 6 | 0.18459750 | 0.18766821 | 0.19076190 | 0.19387839 | 6 |
| 7 | 0.16050635 | 0.16354449 | 0.16660961 | 0.16970147 | 7 |
| 8 | 0.14245639 | 0.14547665 | 0.14852783 | 0.15160965 | 8 |
| 9 | 0.12843386 | 0.13144601 | 0.13449299 | 0.13757447 | 9 |
| 10 | 0.11723051 | 0.12024137 | 0.12329094 | 0.12637882 | 10 |
| 11 | 0.10807745 | 0.11109197 | 0.11414904 | 0.11724818 | 11 |
| 12 | 0.10046209 | 0.10348395 | 0.10655217 | 0.10966619 | 12 |
| 13 | 0.09402954 | 0.09706157 | 0.10014373 | 0.10327535 | 13 |
| 14 | 0.08852634 | 0.09157073 | 0.09466897 | 0.09782032 | 14 |
| 15 | 0.08376658 | 0.08682507 | 0.08994110 | 0.09311381 | 15 |
| 16 | 0.07961085 | 0.08268483 | 0.08582000 | 0.08901537 | 16 |
| 17 | 0.07595253 | 0.07904313 | 0.08219852 | 0.0854 .1758 | 17 |
| 18 | 0.07270870 | 0.07581684 | 0.07899333 | 0.08223690 | 18 |
| 19 | 0.06981388 | 0.07294033 | 0.07613862 | 0.07940734 | 19 |
| 20 | 0.06721571 | 0.07036108 | 0.07358175 | 0.07687614 | 20 |
| 21 | 0.06487178 | 0.06803659 | 0.07128011 | 0.07460057 | 21 |
| 22 | 0.06274739 | 0.06593207 | 0.06919881 | 0.07254565 | 22 |
| 23 | 0.06081390 | 0.06401880 | 0.06730906 | 0.07068249 | 23 |
| 24 | 0.05904742 | 0.06227283 | 0.06558683 | 0.06898703 | 24 |
| 25 | 0.05742787 | 0.06067404 | 0.06401196 | 0.06743903 | 25 |
| 26 | 0.05593829 | 0.05920540 | 0.06256738 | 0.06602137 | 26 |
| 27 | 0.05456421 | 0.05785241 | 0.06123854 | 0.06471946 | 27 |
| 28 | 0.05329323 | 0.05660265 | 0.06001298 | 0.06352081 | 28 |
| 29 | 0.05211467 | 0.05544538 | 0.05887993 | 0.06241461 | 29 |
| 30 | 0.05101926 | 0.05437133 | 0.05783010 | 0.06139154 | 30 |
| 31 | 0.04999893 | 0.05337240 | 0.05685535 | 0.06044345 | 31 |
| 32 | 0.04904662 | 0.05244150 | 0.05594859 | 0.05956320 | 32 |
| 33 | 0.04815612 | 0.05157242 | 0.05510357 | 0.05874453 | 33 |
| 34 | 0.04732196 | 0.05075966 | 0.05431477 | 0.05798191 | 34 |
| 35 | 0.04653929 | 0.04999835 | 0.05357732 | 0.05727045 | 35 |
| 36 | 0.04580379 | 0.04928416 | 0.05288688 | 0.05660578 | 36 |
| 37 | 0.04511162 | 0.04861325 | 0.05223957 | 0.05598402 | 37 |
| 38 | 0.04445934 | 0.04798214 | 0.05163192 | 0.05540169 | 38 |
| 39 | 0.04384385 | 0.04738775 | 0.05106083 | 0.05485567 | 39 |
| 40 | 0.04326238 | 0.04682728 | 0.05052349 | 0.05434315 | 40 |
| 41 | 0.04271241 | 0.04629822 | 0.05001738 | 0.05386158 | 41 |
| 42 | 0.04219167 | 0.04579828 | 0.04954020 | 0.05340868 | 42 |
| 43 | 0.04169811 | 0.04532539 | 0.04908989 | 0.05298235 | 43 |
| 44 | 0.04122985 | 0.04487768 | 0.04866454 | 0.05258071 | 44 |
| 45 | 0.04078518 | 0.04445343 | 0.04826246 | 0.05220202 | 45 |
| 46 | 0.04036254 | 0.04405108 | 0.04788205 | 0.05184471 | 46 |
| 47 | 0.03996051 | 0.04366919 | 0.04752189 | 0.05150734 | 47 |
| 48 | 0.03957777 | 0.04330646 | 0.04718065 | 0.05118858 | 48 |
| 49 | 0.03921314 | 0.04296167 | 0.04685712 | 0.05088722 | 49 |
| 50 | 0.03886550 | 0.04623371 | 0.04655020 | 0.05060215 | 50 |

TABLE V.

$$
a_{\frac{-1}{n}}=i^{\prime}\left(1-v^{n}\right)
$$

| $n$ | $3 \%$ | $3 \%$ | $4 \%$ | $4 \%$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.03853382 | 0.04232156 | 0.04625885 | 0.05033232 | 51 |
| 52 | 0.03821718 | 0.04202429 | 0.04598212 | 0.05007679 | 52 |
| 53 | 0.03791471 | 0.04174100 | 0.04571915 | 0.04983469 | 53 |
| 54 | 0.03762558 | 0.04147090 | 0.04546910 | 0.04960519 | 54 |
| 55 | 0.03734907 | 0.04121323 | 0.04523124 | 0.04938754 | 55 |
| 56 | 0.03708447 | 0.04096730 | 0.04500487 | 0.04918105 | 56 |
| 57 | 0.03683114 | 0.04073245 | 0.04478932 | 0.04898506 | 57 |
| 58 | 0.03658848 | 0.04050810 | 0.04458401 | 0.04879897 | 58 |
| 59 | 0.03635593 | 0.04029366 | 0.04438836 | 0.04862221 | 59 |
| 60 | 0.03613296 | 0.04008862 | 0.04420185 | 0.04845426 | 60 |
| 61 | 0.03591908 | 0.03989249 | 0.04402398 | 0.04829462 | 61 |
| 62 | 0.03571385 | 0.03970480 | 0.04385430 | 0.04814284 | 62 |
| 63 | 0.03551682 | 0.03952513 | 0.04369237 | 0.04799848 | 63 |
| 64 | 0.03532760 | 0.03935308 | 0.04353780 | 0.04786115 | 64 |
| 65 | 0.03514581 | 0.03918826 | 0.04339019 | 0.04773047 | 65 |
| 66 | 0.03497110 | 0.03903031 | 0.04324921 | 0.04760608 | 66 |
| 67 | 0.03480313 | 0.03887892 | 0.04311451 | 0.04748765 | 67 |
| 68 | 0.03464159 | 0.03873375 | 0.04298578 | 0.04737487 | 68 |
| 69 | 0.03448618 | 0.03859453 | 0.04286272 | 0.04726745 | 69 |
| 70 | 0.03433663 | 0.03846095 | 0.04274506 | 0.04716511 | 70 |
| 71 | 0.03419266 | 0.03833277 | 0.04263253 | 0.04706759 | 71 |
| 72 | 0.03405404 | 0.03820973 | 0.04252489 | 0.04697465 | 72 |
| 73 | 0.03392053 | 0.03809160 | 0.04242190 | 0.04688606 | 73 |
| 74 | 0.03379191 | 0.03797816 | 0.04232334 | 0.04680159 | 74 |
| 75 | 0.03366796 | 0.03786919 | 0.04222900 | 0.04672104 | 75 |
| 76 | 0.03354849 | 0.03776450 | 0.04213869 | 0.04664422 | 76 |
| 77 | 0.03343331 | 0.03766390 | 0.04205221 | 0.04657094 | 77 |
| 78 | 0.03332224 | 0.03756721 | 0.04196939 | 0.04650104 | 78 |
| 79 | 0.03321510 | 0.03747426 | 0.04189007 | 0.04643434 | 79 |
| 80 | 0.03311175 | 0.03738489 | 0.04181408 | 0.04637069 | 80 |
| 81 | 0.03301201 | 0.03729894 | 0.04174127 | 0.04630995 | 81 |
| 82 | 0.03291576 | 0.03721628 | 0.04167150 | 0.04625197 | 82 |
| 83 | 0.03282284 | 0.03713676 | 0.04160463 | 0.04619663 | 83 |
| 84 | 0.03273313 | 0.03706025 | 0.04154054 | 0.04614379 | 84 |
| 85 | 0.03264650 | 0.03698662 | 0.04147909 | 0.04609334 | 85 |
| 86 | 0.03256284 | 0.03691576 | 0.04142018 | 0.04604516 | 86 |
| 87 | 0.03248202 | 0.03684756 | 0.04136370 | 0.04599915 | 87 |
| 88 | 0.03240393 | 0.03678190 | 0.04130953 | 0.04595522 | 88 |
| 89 | 0.03232848 | 0.03671868 | 0.04125758 | 0.04591325 | 89 |
| 90 | 0.03225556 | 0.03665781 | 0.04120775 | 0.04587316 | 90 |
| 91 | 0.03218508 | 0.03659919 | 0.04115995 | 0.04583486 | 91 |
| 92 | 0.03211694 | 0.03654273 | 0.04111410 | 0.04579827 | 92 |
| 93 | 0.03205107 | 0.03648834 | 0.04107010 | 0.04576331 | 93 |
| 94 | 0.03198737 | 0.03643594 | 0.04102789 | 0.04572991 | 94 |
| 95 | 0.03192577 | 0.03638546 | 0.04098738 | 0.04569799 | 95 |
| 96 | 0.03186619 | 0.03633682 | 0.04094850 | 0.04566749 | 96 |
| 97 | 0.03180856 | 0.03628995 | 0.04091119 | 0.04563834 | 97 |
| 98 | 0.03175281 | 0.03624478 | 0.04087538 | 0.04561048 | 98 |
| 99 | 0.03169886 | 0.03620124 | 0.04084100 | 0.04558385 | 99 |
| 100 | 0.03164667 | 0.03615927 | 0.04080800 | 0.04555839 | 100 |

Annuity Whose Present Value at Compound Interest Is 1
TABLEV. $\boldsymbol{a}_{n}^{-1}=i /\left(1-v^{n}\right)$

| $n$ | $5{ }_{c}$ | $5 \%$ | $6 \%$ | 7\% | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.05000000 | 1.05500000 | 1.06000000 | 1.07000000 | 1 |
| 2 | 0.53780488 | 0.54161800 | 0.54543689 | 0.55309179 | 2 |
| 3 | 0.36720856 | 0.37065407 | 0.37410981 | 0.38105166 | 3 |
| 4 | 0.28201183 | 0.28529449 | 0.28859149 | 0.29522812 | 4 |
| 5 | 0.23097480 | 0.23417644 | 0.23739640 | 0.24389069 | 5 |
| 6 | 0.19701747 | 0.20017895 | 0.20336263 | 0.20979580 | 6 |
| 7 | 0.17281982 | 0.17596442 | 0.17913502 | 0.18555322 | 7 |
| 8 | 0.15472181 | 0.15786401 | 0.16103594 | 0.16746776 | 8 |
| 9 | 0.14069008 | 0.14383946 | 0.14702224 | 0.15348647 | 9 |
| 10 | 0.12950458 | 0.13266777 | 0.13586796 | 0.14237750 | 10 |
| 11 | 0.12038889 | 0.12357065 | 0.12679294 | 0.13335690 | 11 |
| 12 | 0.11282541 | 0.11602923 | 0.11927703 | 0.12590199 | 12 |
| 13 | 0.10645577 | 0.10968426 | 0.11296011 | 0.11965085 | 13 |
| 14 | 0.10102397 | 0.10427912 | 0.10758491 | 0.11434494 | 14 |
| 15 | 0.09634229 | 0.09962560 | 0.10296276 | 0.10979462 | 15 |
| 16 | 0.09226991 | 0.09558254 | 0.09895214 | 0.10585765 | 16 |
| 17 | 0.08869914 | 0.09204198 | 0.09544480 | 0.10242519 | 17 |
| 18 | 0.08554622 | 0.08891992 | 0.09235654 | 0.09941260 | 18 |
| 19 | 0.08274501 | 0.08615005 | 0.08962086 | 0.09675301 | 19 |
| 20 | 0.08024259 | 0.08367933 | 0.08718456 | 0.09439293 | 20 |
| 21 | 0.07799611 | 0.08146478 | 0.08500455 | 0.09228900 | 21 |
| 22 | 0.07597051 | 0.07947123 | 0.08304557 | 0.09040577 | 22 |
| 23 | 0.07413682 | 0.07766965 | 0.08127848 | 0.08871393 | 23 |
| 24 | 0.07247090 | 0.07603580 | 0.07967900 | 0.08718902 | 24 |
| 25 | 0.07095246 | 0.07454935 | 0.07822672 | 0.08581052 | 25 |
| 26 | 0.06956432 | 0.07319307 | 0.07690435 | 0.08456103 | 26 |
| 27 | 0.06829186 | 0.07195228 | 0.07569717 | 0.08342573 | 27 |
| 28 | 0.06712253 | 0.07081440 | 0.07459255 | 0.08239193 | 28 |
| 29 | 0.06604551 | 0.06976857 | 0.07357961 | 0.08144865 | 29 |
| 30 | 0.06505144 | 0.06880539 | 0.07264891 | 0.08058640 | 30 |
| 31 | 0.06413212 | 0.06791665 | 0.07179222 | 0.07979691 | 31 |
| 32 | 0.06328042 | 0.06709519 | 0.07100234 | 0.07907292 | 32 |
| 33 | 0.06249004 | 0.06633469 | 0.07027293 | 0.07840807 | 33 |
| 34 | 0.06175545 | 0.06562958 | 0.06959843 | 0.07779674 | 34 |
| 35 | 0.06107171 | 0.06497493 | 0.06897386 | 0.07723396 | 35 |
| 36 | 0.06043446 | 0.06436635 | 0.06839483 | 0.07671531 | 36 |
| 37 | 0.05983979 | 0.06379993 | 0.06785743 | 0.07623685 | 37 |
| 38 | 0.05928423 | 0.06327217 | 0.06735812 | 0.07579505 | 38 |
| 39 | 0.05876462 | 0.06277991 | 0.06689377 | 0.07538676 | 39 |
| 40 | 0.05827816 | 0.06232034 | 0.06646154 | 0.07500914 | 40 |
| 41 | 0.05782229 | 0.06189090 | 0.06605886 | 0.07465962 | 41 |
| 42 | 0.05739471 | 0.06148927 | 0.06568342 | 0.07433591 | 42 |
| 43 | 0.05699333 | 0.06111337 | 0.06533312 | 0.07403590 | 43 |
| 44 | 0.05661625 | 0.06076128 | 0.06500606 | 0.07375769 | 44 |
| 45 | 0.05626173 | 0.06043127 | 0.06470050 | 0.07349957 | 45 |
| 46 | 0.05592820 | 0.06012175 | 0.06441485 | 0.07325996 | 46 |
| 47 | 0.05561421 | 0.05983129 | 0.06414768 | 0.07303744 | 47 |
| 48 | 0.05531843 | 0.05955854 | 0.06389766 | 0.07283070 | 48 |
| 49 | 0.05503965 | 0.05930230 | 0.06366356 | 0.07263853 | 49 |
| 50 | 0.05477674 | 0.05906145 | 0.06344429 | 0.07245985 | 50 |

Annuity Whose Present Value at Compound Interest Is 1
TABLE V.

$$
a_{\frac{-1}{n}}^{-1}\left(1-v^{n}\right)
$$

| $n$ | $5{ }_{0}$ | $5 \frac{1}{2} c_{c}$ | $6{ }_{c}$ | ${ }_{7} \sim_{c}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 0.05452867 | 0.05883495 | 0.06323880 | 0.07229365 | 51 |
| 52 | 0.05429450 | 0.05862185 | 0.06304617 | 0.07213901 | 52 |
| 53 | 0.05407334 | 0.05842130 | 0.06286551 | 0.07199509 | 53 |
| 54 | 0.05386438 | 0.05823245 | 0.06269602 | 0.07186110 | 54 |
| 55 | 0.05366686 | 0.05805458 | 0.06253696 | 0.07173633 | 55 |
| 56 | 0.05348010 | 0.05788698 | 0.06238765 | 0.07162011 | 56 |
| 57 | 0.05330343 | 0.05772900 | 0.06224744 | 0.07151183 | 57 |
| 58 | 0.05313626 | 0.05758006 | 0.06211574 | 0.07141093 | 58 |
| 59 | 0.05297802 | 0.05743959 | 0.06199200 | 0.07131689 | 59 |
| 60 | 0.05282818 | 0.05730707 | 0.06187572 | 0.07122923 | 60 |
| 61 | 0.05268627 | 0.05718202 | 0.06176642 | 0.07114749 | 61 |
| 62 | 0.05255183 | 0.05706400 | 0.06166366 | 0.07107127 | 62 |
| 63 | 0.05242442 | 0.05695258 | 0.06156704 | 0.07100019 | 63 |
| 64 | 0.05230365 | 0.05684737 | 0.06147615 | 0.07093388 | 64 |
| 65 | 0.05218915 | 0.05674800 | 0.06139066 | 0.07087203 | 65 |
| 66 | 0.05208057 | 0.05665413 | 0.06131022 | 0.07081431 | 66 |
| 67 | 0.05197757 | 0.05656544 | 0.06123454 | 0.07076046 | 67 |
| 68 | 0.05187986 | 0.05648163 | 0.06116330 | 0.07071021 | 68 |
| 69 | 0.05178715 | 0.05640242 | 0.06109625 | 0.07066331 | 69 |
| 70 | 0.05169915 | 0.05632754 | 0.06103313 | 0.07061953 | 70 |
| 71 | 0.05161563 | 0.05625675 | 0.06097370 | 0.07057866 | 71 |
| 72 | 0.05153633 | 0.05618982 | 0.06091774 | 0.07054051 | 72 |
| 73 | 0.05146103 | 0.05612652 | 0.06086505 | 0.07050490 | 73 |
| 74 | 0.05138953 | 0.05606665 | 0.06081542 | 0.07047164 | 74 |
| 75 | 0.05132161 | 0.05601002 | 0.06076867 | 0.07044060 | 75 |
| 76 | 0.05125709 | 0.05595645 | 0.06072463 | 0.07041160 | 76 |
| 77 | 0.05119580 | 0.05590577 | 0.06068315 | 0.07038453 | 77 |
| 78 | 0.05113756 | 0.05585781 | 0.06064407 | 0.07035924 | 78 |
| 79 | 0.05108222 | 0.05581243 | 0.06060724 | 0.07033563 | 79 |
| 80 | 0.05102962 | 0.05576948 | 0.06057254 | 0.07031357 | 80 |
| 81 | 0.05097963 | 0.05572884 | 0.06053984 | 0.07029297 | 81 |
| 82 | 0.05093211 | 0.05569036 | 0.06050903 | 0.07027373 | 82 |
| 83 | 0.05088694 | 0.05565395 | 0.06047998 | 0.07025576 | 83 |
| 84 | 0.05084399 | 0.05561947 | 0.06045261 | 0.07023897 | 84 |
| 85 | 0.05080316 | 0.05558683 | 0.06042681 | 0.07022329 | 85 |
| 86 | 0.05076433 | 0.05555593 | 0.06040249 | 0.07020863 | 86 |
| 87 | 0.05072740 | 0.05552667 | 0.06037956 | 0.07019495 | 87 |
| 88 | 0.05069228 | 0.05549896 | 0.06035795 | 0.07018216 | 88 |
| 89 | 0.05065888 | 0.05547273 | 0.06033757 | 0.07017021 | 89 |
| 90 | 0.05062711 | 0.05544788 | 0.06031836 | 0.07015905 | 90 |
| 91 | 0.05059689 | 0.05542435 | 0.06030025 | 0.07014863 | 91 |
| 92 | 0.05056815 | 0.05540207 | 0.06028318 | 0.07013888 | 92 |
| 93 | 0.05054080 | 0.05538096 | 0.06026708 | 0.07012978 | 83 |
| 94 | 0.05051478 | 0.05536097 | 0.06025190 | 0.07012128 | 94 |
| 95 | 0.05049003 | 0.05534204 | 0.06023758 | 0.07011333 | 95 |
| 96 | 0.05046648 | 0.05532410 | 0.06022408 | 0.07010590 | 96 |
| 97 | 0.05044407 | 0.05530711 | 0.06021135 | 0.07009897 | 97 |
| 98 | 0.05042274 | 0.05529101 | 0.06019935 | 0.07009248 | 98 |
| 99 | 0.05040245 | 0.05527577 | 0.06018803 | 0.07008643 | 99 |
| 100 | 0.05038314 | 0.05526132 | 0.06017736 | 0.07008076 | . 100 |

TABLE VI. $\quad(1+i)^{1 p}$

| P | $1 \%$ | 1\% | $1 \%$ | $1{ }^{3} \mathrm{C}$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 1.00498756 | 1.00623059 | 1.00747208 | 1.00871205 | 2 |
| 3 | 1.00332228 | 1.00414943 | 1.00497521 | 1.00579963 | 3 |
| 4 | 1.00249068 | 1.00311046 | 1.00372909 | 1.00434658 | 4 |
| 6 | 1.00165977 | 1.00207257 | 1.00248452 | 1.00289562 | 6 |
| 12 | 1.00082954 | 1.00103575 | 1.00124149 | 1.00144677 | 12 |
| 13 | 1.00076570 | 1.00095604 | 1.00114594 | 1.00133540 | 13 |
| 26 | 1.00038278 | 1.00047790 | 1.00057280 | 1.00066748 | 26 |
| 52 | 1.00019137 | 1.00023892 | 1.00028636 | 1.00033368 | 52 |
| $\boldsymbol{p}$ | $2 \%$ | $2 \frac{1}{4}$ | $22_{2}$ | $3_{4}^{3} \cdot{ }_{6}$ | P |
| 2 | 1.00995050 | 1.01118742 | 1.01242284 | 1.01365675 | 2 |
| 3 | 1.00662271 | 1.00744444 | 1.00826484 | 1.00908390 | 3 |
| 4 | 1.00496293 | 1.00557815 | 1.00619225 | 1.00680522 | 4 |
| 6 | 1.00330589 | 1.00371532 | 1.00412392 | 1.00453168 | 6 |
| 12 | 1.00165158 | 1.00185594 | 1.00205984 | 1.00226328 | 12 |
| 13 | 1.00152444 | 1.00171305 | 1.00190124 | 1.00208900 | 13 |
| 26 | 1.00076193 | 1.00085616 | 1.00095017 | 1.00104396 | 26 |
| 52 | 1.00038089 | 1.00042799 | 1.00047497 | 1.00052184 | 52 |
| p | $3 \%$ | $3{ }_{2}{ }_{2}$ | $1{ }^{\circ}$ | $4{ }^{1}$ | $p$ |
| 2 | 1.01488916 | 1.01734950 | 1.01980390 | 1.02225242 |  |
| 3 | 1.00990163 | 1.01153314 | 1.01315941 | 1.01478046 | 3 |
| 4 | 1.00741707 | 1.00863745 | 1.00985341 | 1.01106499 | 4 |
| 6 | 1.00493862 | 1.00575004 | 1.00655820 | 1.00736312 | , |
| 12 | 1.00246627 | 1.00287090 | 1.00327374 | 1.00367481 | 12 |
| 13 | 1.00227634 | 1.00264977 | 1.00302153 | 1.00339165 | 13 |
| 26 | 1.00113752 | 1.00132401 | 1.00150963 | 1.00169439 | 26 |
| 52 | 1.00056860 | 1.00066179 | 1.00075453 | 1.00084684 | 52 |
| p | 5\% | $5{ }^{1} 20$ | $6 \%$ | $7 \%$ | $p$ |
| 2 | 1.02469508 | 1.02713193 | 1.02956302 | 1.03440804 | 2 |
| 3 | 1.01639636 | 1.01800713 | 1.01961282 | 1.02280912 | 3 |
| 4 | 1.01227224 | 1.01347518 | 1.01467385 | 1.01705853 | 4 |
| 6 | 1.00816485 | 1.00896340 | 1.00975880 | 1.01134026 | 6 |
| 12 | 1.00407412 | 1.00447170 | 1.00486755 | 1.00565415 | 12 |
| 13 | 1.00376014 | 1.00412701 | 1.00449228 | 1.00521808 | 13 |
| 26 | 1.00187831 | 1.00206138 | 1.00224363 | 1.00260564 | 26 |
| 52. | 1.00093871 | 1.00103016 | 1.00112118 | 1.00130197 | 52 |

Logarithm of Amount of 1 at Compound Interest for Fractional Periods

TABLE VII. $\quad \log (1+i)^{1}{ }^{p}$

| P | $1 \%$ | 11/4 | $1{ }_{2}^{1}$ | $13 \%$ | P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | .0021607 | . 0026975 | . 0032330 | . 0037672 | 2 |
| 3 | .0014405 | . 0017983 | . 0021553 | . 0025115 | 3 |
| 4 | .0010803 | . 0013488 | . 0016165 | . 0018836 | 4 |
| 6 | . 0007202 | . 0008992 | . 0010777 | . 0012557 | 6 |
| 12 | .0003601 | . 0004496 | . 0005388 | . 0006279 | 12 |
| 13 | . 0003324 | . 0004150 | . 0004974 | . 0005796 | 13 |
| 26 | . 0001662 | . 0002075 | . 0002487 | . 0002898 | 26 |
| 52 | .0000831 | . 0001038 | . 0001243 | . 0001449 | 52 |
| $p$ | 20 | $21 \%$ | $2^{1} 2^{\prime}$ | $2{ }_{4}^{3} C_{C}$ | $P$ |
| 2 | . 0043001 | . 0048317 | . 0053619 | .0058909 | 2 |
| 3 | . 0028667 | . 0032211 | . 0035746 | . 0039273 | 3 |
| 4 | . 0021500 | .0024158 | .0026810 | . 0029455 | 4 |
| 6 | .0014334 | .0016106 | .0017873 | . 0019636 | 6 |
| 12 | . 0007167 | . 0008053 | . 0008937 | . 0009818 | 12 |
| 13 | . 0006616 | .0007433 | . 0008249 | . 0009063 | 13 |
| 26 | . 0003308 | .0003717 | . 0004125 | .0004531 | 26 |
| 52 | . 0001654 | . 0001858 | . 0002062 | . 0002266 | 52 |
| P | $3 \%$ | $3{ }^{1}{ }^{\prime}$ | $1{ }^{\circ}$ | $1 \%$ | $P$ |
| 2 | . 0064186 | . 0074702 | . 0085167 | . 0095581 | 2 |
| 3 | . 0042791 | . 0049801 | . 0056778 | . 0063721 | 3 |
| 4 | . 0032093 | .0037351 | . 0042583 | . 0047791 | 4 |
| 6 | . 0021395 | .0024901 | . 0028389 | . 0031860 | 6 |
| 12 | .0010698 | . 0012450 | . 0014194 | . 0015930 | 12 |
| 13 | . 0009875 | . 0011493 | .0013103 | .0014705 | 13 |
| 26 | . 0004937 | . 0005746 | . 0006551 | . 0007352 | 26 |
| 52 | . 0002469 | . 0002873 | . 0003276 | . 0003676 | 52 |
| $p$ | $5 \%$ | $5 \%$ | $6 \%$ | $7 \%$ | $p$ |
| 2 | . 0105946 | . 0116262 | . 0126529 | . 0146919 | 2 |
| 3 | . 0070631 | . 0077508 | . 0084353 | . 0097946 | 3 |
| 4 | . 0052973 | :005 8131 | . 0063265 | . 0073459 | 4 |
| 6 | . 0035315 | . 0038754 | . 0042176 | . 0048973 | 6 |
| 12 | .0017658 | . 0019377 | .0021088 | . 0024486 | 12 |
| 13 | .001. 6299 | .0017887 | . 0019466 | . 0022603 | 13 |
| 26 | .0008150 | . 0008943 | . 0009733 | . 0011301 | 26 |
| 52 | .0004075 | . 0004472 | . 0004867 | . 0005651 | 52 |

Nominal Rate of Interest $\boldsymbol{j}$ with Frequency of Conversion $p$ Corresponding to Effective Rate of Interest $i$
TABLE VIII.

$$
j_{(p)}=\dot{p}\left[(1+i)^{1 p}-1\right]
$$

| $p$ | $1 \%$ | 11/\% | $11 / 2 \mathrm{C}$ | $13 \%$ | P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | . 00997512 | . 01246118 | . 01494417 | . 01742410 | 2 |
| 3 | . 00996685 | .01244828 | . 01492562 | . 01739890 | 3 |
| 4 | . 00996272 | .01244183 | . 01491636 | . 01738631 | 4 |
| 6 | . 00995859 | . 01243539 | . 01490710 | . 01737374 | 6 |
| 12 | . 00995446 | . 01242895 | . 01489785 | . 01736119 | 12 |
| 13 | . 00995414 | . 01242846 | . 01489714 | . 01836022 | 13 |
| 26 | . 00995224 | . 01242549 | . 01489288 | . 01735443 | 26 |
| 52 | . 00995128 | . 01242400 | . 01489074 | . 01735153 | 52 |
| $\bigcirc$ | . 00995033 | . 01242252 | . 01488861 | . 01734864 | $\infty$ |
| $P$ | $2 \%$ | 2140 | 2\%\% | $23 \cdot{ }_{6}$ | $p$ |
| 2 | . 01990099 | . 02237484 | . 02484567 | . 02731349 | 2 |
| 3 | .01986813 | . 02233333 | . 02479451 | . 02725170 | 3 |
| 4 | . 01985173 | . 02231261 | . 02476899 | .02722087 | 4 |
| 6 | . 01983534 | . 02229192 | . 02474349 | .02719009 | 6 |
| 12 | . 01981898 | .02227125 | . 02471804 | .02715936 | 12 |
| 13 | .01981772 | .02226966 | . 02471608 | .02715699 | 13 |
| 26 | . 01981017 | .02226013 | . 02470434 | . 02714283 | 26 |
| 52 | . 01980640 | .02225537 | . 02469848 | . 02713575 | 52 |
| $\infty$ | .01980263 | . 02225061 | . 02469261 | .02712867 | $\propto$ |
| $P$ | $3 \%$ | 3120 | 4 \% | 4\%\% | P |
| 2 | .02977831 | . 03469899 | .03960781 | . 04450483 | 2 |
| 3 | . 02970490 | . 03459943 | . 03947821 | .04434138 | 3 |
| 4 | .02966829 | .03454978 | .03941363 | . 04425996 | 4 |
| 6 | .02963173 | . 03450024 | .03934918 | .04417874 | 6 |
| 12 | . 02959524 | . 03445078 | . 03928488 | . 04409771 | 12 |
| 13 | .02959243 | .03444698 | .03927994 | .04409149 | 13 |
| 26 | . 02957561 | . 03442420 | . 03925031 | . 04405417 | 26 |
| 52 | .02956721 | . 03441281 | . 03923551 | . 00403552 | 52 |
| $\infty$ | .02955880 | .03440143 | .03922071 | . 04401689 | $\bigcirc$ |
| $P$ | $5 \%$ | $5^{1} 2$ | $6^{\circ}$ | $7 c_{c}$ | $p$ |
| 2 | . 04939015 | . 05426386 | . 05912603 | . 06881609 | 2 |
| 3 | . 04918907 | . 05402139 | . 05883847 | . 06842737 | 3 |
| 4 | .04908894 | . 05390070 | .05869538 | . 06823410 | 4 |
| 6 | . 04898908 | . 05378036 | . 05855277 | . 06804156 | 6 |
| 12 | .04888949 | . 05366039 | . 05841061 | . 06784974 | 12 |
| 13 | .04888184 | . 05365117 | .05839969 | . 06783502 | 13 |
| 26 | .04883597 | . 05359593 | . 05833425 | . 06774676 | 26 |
| 52 | .04881306 | . 05356834 | . 05830157 | . 06770268 | 52 |
| $\infty$ | .04879016 | .05354077 | .05826891 | . 06765865 | $\infty$ |

Logarithm of Nominal Rate of Interest $\boldsymbol{j}$ with Frequeney of Conversion $p$ Corresponding to Effective Rate of Interest $i$
TABLE IN.
$\log _{\boldsymbol{g}}^{(p)}$

| p | $1 \%$ | $1{ }_{4}^{1} \sim_{C}$ | $1 \%$ | $13 \%$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 7.9989183 | 8.0955592 | 8.1744717 | 8.2411504 | 2 |
| 3 | 7.9985579 | 8.0951092 | 8.1739323 | 8.2405217 | 3 |
| 4 | 7.9983778 | 8.0948843 | 8.1736627 | 8.2402075 | 4 |
| 6 | 7.9981977 | 8.0946594 | 8.1733932 | 8.2398934 | 6 |
| 12 | 7.9980176 | 8.0944345 | 8.1731237 | 8.2395794 | 12 |
| 13 | 7.9980037 | 8.0944172 | 8.1731029 | 8.2395552 | 13 |
| 26 | 7.9979206 | 8.0943135 | 8.1729786 | 8.2394103 | 26 |
| 52 | 7.9978791 | 8.0942616 | 8.1729164 | 8.2393378 | 52 |
| $\odot$ | 7.9978375 | 8.0942097 | 8.1728542 | 8.2392654 | 00 |
| $p$ | $2^{C}$ | $2{ }^{1} \cdot 6$ | $2 \%$ | $23 \%$ | $p$ |
| 2 | 8.2988746 | 8.3497600 | 8.3952508 | 8.4363772 | 2 |
| 3 | 8.2981570 | 8.3489535 | 8.3943556 | 8.4353936 | 3 |
| 4 | 8.2977983 | 8.3485504 | 8.3939082 | 8.4349020 | 4 |
| 6 | 8.2974397 | 8.3481474 | 8.3934610 | 8.4344107 | 6 |
| 12 | 8.2970812 | 8.3477446 | 8.3930139 | 8.4339195 | 12 |
| 13 | 8:297 0536 | 8.3477136 | 8.3929796 | 8.4338817 | 13 |
| 26 | 8.2968882 | 8.3475277 | 8.3927733 | 8.4336550 | 26 |
| 52 | 8.2968055 | 8.3474348 | 8.3926702 | 8.4335418 | 52 |
| 00 | 8.2967228 | 8.3473419 | 8.3925670 | 8.4334285 | $\infty$ |
| P | $3{ }_{c}$ | $3{ }_{2}{ }^{2}$ | $4 \%$ | $42 \%$ | $P$ |
| 2 | 8.4739000 | 8.5403169 | 8.5977808 | 8.6484071 | 2 |
| 3 | 8.4728281 | 8.5390689 | 8.5963575 | 8.6468093 | 3 |
| 4 | 8.4722925 | 8.5384453 | 8.5956464 | 8.6460110 | 4 |
| 6 | 8.4717570 | 8.5378221 | 8.5949357 | 8.6452133 | 6 |
| 12 | 8.4712219 | 8.5371991 | 8.5942254 | 8.6444160 | 12 |
| 13 | 8.4711806 | 8.5371512 | 8.5941708 | 8.6443548 | 13 |
| 26 | 8.4709337 | 8.5368639 | 8.5938431 | 8.6439870 | 26 |
| 52 | 8.4708103 | 8.5367201 | 8.5936793 | 8.6438031 | 52 |
| $=0$ | 8.4706868 | 8.5365765 | 8.5935155 | 8.6436194 | 00 |
| $\boldsymbol{p}$ | $5{ }_{C}$ | $5 \%$ | $\mathbf{6}_{\%}^{\%}$ | $7 \%$ | P |
| 2 | 8.6936404 | 8.7345107 | 8.7717787 | 8.8376900 | 2 |
| 3 | 8.6918686 | 8.7325658 | 8.7696614 | 8.8352298 | 3 |
| 4 | 8.6909836 | 8.7315944 | 8.7686040 | 8.8340015 | 4 |
| 6 | 8.6900993 | 8.7306237 | 8.7675474 | 8.8327743 | 6 |
| 12 | 8.6892155 | 8.7296538 | 8.7664917 | 8.8315482 | 12 |
| 13 | 8.6891475 | 8.7295792 | 8.7664105 | 8.8314540 | 13 |
| 26 | 8.6887398 | 8.7291318 | 8.7659236 | 8.8308885 | 26 |
| 52 | 8.6885360 | 8.7289082 | 8.7656803 | 8.8306059 | 52 |
| $\approx$ | 8.6883323 | 8.7286846 | 8.7654369 | 8.8303233 | 0 |

Amount at End of Year at Compound Interest of $p$ Installments Each of 1 p Deposited at End of Each pth Part of Year
TABLE X .

$$
s_{\frac{p}{1}}^{(p)}=i j_{(p)}
$$

| $P$ | $1 \%$ | 11\% | $1{ }_{2} \%$ | $13 \%$ | $\boldsymbol{P}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 1.00249378 | 1.00311529 | 1.00373604 | 1.00435603 | 2 |
| 3 | 1.00332596 | 1.00415516 | 1.00498346 | 1.00581084 | 3 |
| 4 | 1.00374223 | 1.00467537 | 1.00560755 | 1.00653878 | 4 |
| 6 | 1.00415861 | 1.00519575 | 1.00623191 | 1.00726707 | 6 |
| 12 | 1.00457510 | 1.00571632 | 1.00685652 | 1.00799571 | 12 |
| 13 | 1.00460714 | 1.00575637 | 1.00690458 | 1.00805177 | 13 |
| 26 | 1.00479941 | 1.00599669 | 1.00719296 | 1.00838820 | 26 |
| 52 | 1.00489556 | 1.00611687 | 1.00733717 | 1.00855644 | 52 |
| $\infty$ | 1.00499171 | 1.00623706 | 1.00748139 | 1.00872470 | $=$ |
| P | $2 \%$ | $21 \%$ | $2 \%$ | $23{ }_{4} \sim_{c}$ | $p$ |
| 2 | 1.00497525 | 1.00559371 | 1.00621142 | 1.00682837 | 2 |
| 3 | 1.00663733 | 1.00746292 | 1.00828761 | 1.00911141 | 3 |
| 4 | 1.00746906 | 1.00839839 | 1.00932677 | 1.01025422 | 4 |
| 6 | 1.00830125 | 1.00933444 | 1.01036665 | 1.01139789 | 6 |
| 12 | 1.00913389 | 1.01027107 | 1.01140725 | 1.01254243 | 12 |
| 13 | 1.00919796 | 1.01034314 | 1.01148732 | 1.01263051 | 13 |
| 26 | 1.00958243 | 1.01077565 | 1.01196786 | 1.01315908 | 26 |
| 52 | 1.00977470 | 1.01099195 | 1.01220819 | 1.01342343 | 52 |
| $\infty$ | 1.00996700 | 1.01120828 | 1.01244856 | 1.01368783 | $\infty$ |
| P | $3 \%$ | $3{ }_{2}{ }_{2}$ | $4{ }_{0}$ | $4_{2}^{1} C_{c}$ | $p$ |
| 2 | 1.00744458 | 1.00867475 | 1.00990195 | 1.01112621 | 2 |
| 3 | 1.00993431 | 1.01157748 | 1.01321713 | 1.01485328 | 3 |
| 4 | 1.01118072 | 1.01303094 | 1.01487744 | 1.01672026 | 4 |
| 6 | 1.01242816 | 1.01448578 | 1.01653957 | 1.01858953 | 6 |
| 12 | 1.01367662 | 1.01594203 | 1.01820351 | 1.02046109 | 12 |
| 13 | 1.01377270 | 1.01605410 | 1.01833158 | 1.02060515 | 13 |
| 26 | 1.01434929 | 1.01672674 | 1.01910023 | 1.02146980 | 26 |
| 52 | 1.01463767 | 1.01706316 | 1.01948470 | 1.02190231 | 52 |
| so | 1.01492610 | 1.01739966 | 1.01986927 | 1.02233494 | $\approx$ |
| $p$ | $5 \%$ | $5^{1} \times$ | $6 \%$ | $7 \%$ | $p$ |
| 2 | 1.01234754 | 1.01356596 | 1.01478151 | 1.01720402 | 2 |
| 3 | 1.01648597 | 1.01811522 | 1.01974104 | 1.02298254 | 3 |
| 4 | 1.01855942 | 1.02039495 | 1.02222688 | 1.02588002 | 4 |
| 6 | 1.02063570 | 1.02267810 | 1.02471676 | 1.02878298 | 6 |
| 12 | 1.02271479 | 1.02496465 | 1.02721070 | 1.03169143 | 12 |
| 13 | 1.02287484 | 1.02514068 | 1.02740270 | 1.03191538 | 13 |
| 26 | 1.02383548 | 1.02619729 | 1.02855526 | 1.03325978 | 26 |
| 52 | 1.02431602 | 1.02672586 | 1.02913186 | 1.03393242 | 52 |
| 0 | 1.02479672 | 1.02725462 | 1.02970867 | 1.03460535 | $=0$ |

Logarithm of Amount at End of Year at Compound Interest of $p$ Installments Each of 1 p Deposited at End of Each pth Part of Year TABLE XI. $\boldsymbol{\operatorname { l o g } s \frac { ( p ) } { 1 }}$

| $p$ | $1 \%$ | $1 \%$ | $1 \%$ | 13\% | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | . 0010817 | . 0013509 | . 0016195 | . 0018877 | 2 |
| 3 | . 0014421 | . 0018008 | . 0021589 | . 0025163 |  |
| 4 | . 0016222 | . 0020258 | . 0024285 | . 0028305 | 4 |
| 6 | . 0018023 | . 0022506 | . 0026981 | . 0031446 | 6 |
| 12 | . 0019824 | . 0024755 | . 0029676 | . 0034587 | 12 |
| 13 | . 0019963 | . 0024928 | . 0029883 | . 0034828 | 13 |
| 26 | . 0020794 | . 0025966 | . 0031127 | . 0036278 | 26 |
| 52 | . 0021209 | . 0026484 | . 0031749 | . 0037002 | 52 |
| $\infty$ | . 0021625 | . 0027003 | . 0032370 | . 0037727 | $\infty$ |
| $p$ | $2 \%$ | $2^{1} 4 \%$ | $21 \%$ | $23 \%$ | $p$ |
| 2 | . 0021554 | . 0024225 | . 0026892 | . 0029554 | 2 |
| 3 | . 0028730 | . 0032291 | . 0035844 | . 0039391 | 3 |
| 4 | . 0032317 | . 0036321 | . 0040318 | . 0044307 | 4 |
| 6 | . 0035903 | . 0040351 | . 0044790 | . 0049220 | 6 |
| 12 | . 0039488 | . 0044379 | . 0049261 | . 0054132 | 12 |
| 13 | . 0039764 | . 0044689 | . 0049604 | . 0054510 | 13 |
| 26 52 | .0041418 <br> 042245 | . 0046548 | .0051667 .0052698 | . 0056776 | 26 52 |
| 52 | . 0042245 | . 0047477 | . 0052698 | . 0057909 | 52 |
| $\infty$ | . 0043072 | . 0048406 | . 0053730 | . 0059042 | $\infty$ |
| $p$ | $3 \%$ | 3120 | $4 \%$ | $112 \%$ | $\boldsymbol{p}$ |
| 2 | . 0032212 | . 0037511 | . 0042792 | . 0048054 | 2 |
| 3 | . 0042931 | . 0049991 | . 0057025 | . 0064033 | 3 |
| 4 | . 0048288 | . 0056227 | . 0064136 | . 0072015 | 4 |
| 6 | . 0053642 | . 0062460 | . 0071243 | . 0079992 | 6 |
| 12 | . 0058994 | . 0068689 | . 0078346 | . 0087965 | 12 |
| 13 | . 0059406 | . 0069168 | . 0078892 | . 0088578 | 13 |
| 26 | . 0061875 | . 0072042 | . 0082169 | . 0092255 | 26 |
| 52 | . 0063110 | . 0073479 | . 0083807 | . 0094094 | 52 |
| $\bigcirc$ | . 0064344 | . 0074916 | . 0085445 | . 0095932 | $\infty$ |
| $p$ | $5^{\sim}$ | $5 \%$ | $6 \%$ | $7 \%$ | $p$ |
| 2 | . 0053296 | . 0058520 | . 0063725 | . 0074081 | 2 |
| 3 | . 0071014 | . 0077969 | . 0084899 | . 0098682 | 3 |
| 4 | . 0079864 | . 0087683 | . 0095473 | . 0110966 | 4 |
| 6 | . 0088708 | . 0097390 | . 0106038 | . 0123238 | 6 |
| 12 | . 0097545 | . 0107089 | . 0116595 | . 0135498 | 12 |
| 13 | . 0098225 | . 0107835 | . 0117407 | . 0136441 | 13 |
| 26 | . 0102302 | . 0112309 | . 0122276 | . 0142095 | 26 |
| 52 | . 0104340 | . 0114545 | . 0124710 | . 0144922 | 52 |
| $=0$ | . 0106377 | . 0116781 | . 0127144 | . 0147747 | $\bigcirc$ |

Logarithm of Amount of 1 at Compound Interest
TABLE XII.
$\log (1+i)^{n}$

| $n$ | $1 \%$ | $11 \%$ | $11 / 20$ | $13 \cdot{ }_{4}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0043214 | . 0053950 | . 0064660 | . 0075344 | 1 |
| 2 | . 0086427 | . 0107901 | . 0129321 | . 0150688 | 2 |
| 3 | . 0129641 | .0161851 | . 0193981 | . 0226033 | 3 |
| 4 | . 0172855 | .0215801 | . 0258642 | . 0301377 | 4 |
| 5 | .0216069 | . 0269752 | . 0323302 | . 0376721 | 5 |
| 6 | . 0259282 | . 0323702 | . 0387963 | . 0452065 | 6 |
| 7 | . 0302496 | . 0377652 | . 0452623 | . 0527409 | 7 |
| 8 | . 0345710 | . 0431603 | . 0517283 | . 0602753 | 8 |
| 9 | . 0388924 | . 0485553 | . 0581944 | . 0678098 | 9 |
| 10 | . 0432137 | . 0539504 | . 0646604 | . 0753442 | 10 |
| 11 | . 0475350 | . 0593454 | . 0711265 | . 0828786 | 11 |
| 12 | . 0518565 | . 0647404 | . 0775925 | . 0904130 | 12 |
| 13 | . 0561779 | . 0701354 | . 0840585 | . 0979474 | 13 |
| 14 | . 0604992 | . 0755304 | . 0905246 | . 1054819 | 14 |
| 15 | . 0648206 | . 0809255 | . 0969906 | .1130163 | 15 |
| 16 | . 0691420 | . 0863205 | .1034567 | .1205507 | 16 |
| 17 | . 0734634 | . 0917155 | . 1099227 | . 1280851 | 17 |
| 18 | . 0777847 | .0971106 | . 1163888 | . 1356195 | 18 |
| 19 | . 0821061 | .1025056 | . 1228548 | . 1431539 | 19 |
| 20 | . 0864275 | . 1079006 | . 1293208 | . 1506884 | 20 |
| 21 | . 0907488 | . 1132957 | .1357869 | . 1582228 | 21 |
| 22 | . 0950702 | . 1186907 | . 1422529 | . 1657572 | 22 |
| 23 | . 0993916 | . 1240857 | . 1487190 | . 1732916 | 23 |
| 24 | .1037130 | . 1294808 | . 1551850 | . 1808260 | 24 |
| 25 | .1080343 | .1348758 | .1616511 | .1883604 | 25 |
| 26 | . 1123557 | . 1402708 | .1681171 | . 1958949 | 26 |
| 27 | . 1166771 | . 1456659 | .1745831 | .2034293 | 27 |
| 28 | . 1209985 | .1510609 | . 1810492 | . 2109637 | 28 |
| 29 | . 1253198 | . 1564559 | . 1875152 | .2184981 | 29 |
| 30 | . 1296412 | .1618510 | . 1939813 | . 2260325 | 30 |
| 31 | . 1339626 | . 1672460 | . 2004473 | . 2335670 | 31 |
| 32 | . 1382840 | .1726410 | . 2069134 | . 241.1014 | 32 |
| 33 | . 1426053 | .1780361 | . 2133794 | . 2486358 | 33 |
| 34 | . 1469267 | .1834311 | . 2198454 | . 2561702 | 34 |
| 35 | . 1512481 | .1888261 | . 2263115 | . 2637046 | 35 |
| 36 | . 1555695 | . 1942211 | . 2327775 | . 2712390 | 36 |
| 37 | . 1598908 | . 1996162 | . 2392436 | . 2787735 | 37 |
| 38 | . 1642122 | . 2050112 | . 2457096 | . 2863079 | 38 |
| 39 | . 1685336 | . 2104062 | .2521756 | . 2938423 | 39 |
| 40 | . 1728550 | .2158013 | . 2586417 | .3013767 | 40 |
| 41 | . 1771763 | .2211963 | . 2651077 | . 3089111 | 41 |
| 42 | .1814977 | . 2265913 | . 2715738 | . 3164456 | 42 |
| 43 | .1858191 | . 2319864 | . 2780398 | . 3239800 | 43 |
| 44 | . 1901404 | . 2373814 | . 2845059 | . 3315144 | 44 |
| 45 | . 1944618 | . 2427764 | . 2909719 | . 3390488 | 45 |
| 46 | . 1987832 | . 2481715 | . 2974379 | . 3465832 | 46 |
| 47 | . 2031046 | . 2535665 | . 3039040 | . 3541176 | 47 |
| 48 | . 2074259 | . 2589615 | . 3103700 | . 3616521 | 48 |
| 49 | .2117473 | . 2643566 | . 3168361 | . 3691865 | 49 |
| 50 | . 2160687 | . 2697516 | .3233021 | . 3767209 | 50 |

Logarithm of Amount of 1 at Compound Interest

TABLE XII.
$\log (1+i)^{n}$

| $n$ | $1 \%$ | 14.8 | $1 \%$ | $13 . \%$ | " |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | . 2203901 | . 2751466 | . 3297682 | . 3842553 | 51 |
| 52 | . 2247114 | . 2805417 | . 3362342 | . 3917897 | 52 |
| 53 | . 2290328 | . 2859367 | . 3427002 | . 3993241 | 53 |
| 54. | . 2333542 | . 2913317 | . 3491663 | .4068586 | 54 |
| 55 | . 2376756 | . 2967268 | . 3556323 | .4143930 | 55 |
| 56 | . 2419969 | .3021218 | . 3620984 | . 4219274 | 56 |
| 57 | . 2463183 | . 3075168 | . 3685644 | .4294618 | 57 |
| 58 | . 2506397 | . 3129118 | . 3750304 | .4369962 | 58 |
| 59 | . 2549611 | . 3183069 | .3814965 | . 4445307 | 59 |
| 60 | . 2592824 | . 3237019 | . 3879625 | .4520651 | 60 |
| 61 | . 2636038 | . 3290969 | . 3944286 | .4595995 | 61 |
| 62 | . 2679252 | . 3344920 | . 4008946 | . 4671339 | 62 |
| 63 | . 2722465 | . 3398870 | . 4073607 | . 4746683 | 63 |
| 64 | . 2765679 | . 3452820 | .4138267 | . 4822027 | 64 |
| 65 | .2808893 | . 3506771 | . 4202927 | . 4897372 | 65 |
| 66 | . 2852107 | . 3560721 | . 4267588 | . 4972716 | 66 |
| 67 | . 2895320 | . 3614671 | . 4332248 | . 5048060 | 67 |
| 68 | . 2938534 | . 3668622 | . 4396909 | . 5123404 | 68 |
| 69 | .2981748 | . 3722572 | .4461569 | . 5198748 | 69 |
| 70 | . 3024962 | . 3776522 | . 4526230 | .5274093 | 70 |
| 71 | . 3068175 | . 3830473 | . 4590890 | . 5349437 | 71 |
| 72 | . 3111389 | . 3884423 | . 4655550 | . 5424781 | 72 |
| 73 | . 3154603 | . 3938373 | . 4720211 | . 5500125 | 73 |
| 74 | . 3197817 | . 3992324 | .4784871 | . 5575469 | 74 |
| 75 | . 3241030 | . 4046274 | .4849532 | .5650813 | 75 |
| 76 | . 3284244 | .4100224 | . 4914192 | . 5726158 | 76 |
| 77 | . 3327458 | .4154175 | . 4978852 | . 5801502 | 77 |
| 78 | . 3370672 | . 4208125 | . 5043513 | . 5876846 | 78 |
| 79 | .3413887 | . 4262075 | . 5108173 | .5952190 | 79 |
| 80 | . 3457099 | .4316026 | . 5172834 | . 6027534 | 80 |
| 81 | . 3500313 | . 4369976 | . 5237494 | . 6102878 | 81 |
| 82 | . 3543527 | . 4423926 | . 5302155 | . 6178223 | 82 |
| 83 | . 3586740 | . 4477876 | . 5366815 | .6253567 | 83 |
| 84 | . 3629954 | .4531827 | . 5431475 | .6328911 | 84 |
| 85 | .3673168 | .4585777 | .5496136 | .6404255 | 85 |
| 86 | .3716381 | . 4639727 | . 5560796 | . 6479599 | 86 |
| 87 | . 3759595 | . 4693678 | . 5625457 | . 6554944 | 87 |
| 88 | . 3802809 | . 4747628 | . 5690117 | . 6630288 | 88 |
| 89 | . 3846023 | . 4801578 | .5754778 | . 6705632 | 89 |
| 90 | .3889237 | .4855529 | .5819438 | .6780976 | 90 |
| 91 | . 3932450 | . 4909479 | .5884098 | .6856320 | 91 |
| 92 | . 3975664 | .4963429 | . 5948759 | . 6931664 | 92 |
| 93 | .4018878 | . 5017380 | . 6013419 | . 7007009 | 93 |
| 94 | .4062091 | .5071330 | . 6078080 | . 7082353 | 94 |
| 95 | .4105305 | . 5125280 | . 6142740 | .7157697 | 95 |
| 96 | . 4148519 | . 5179231 | .6207401 | .7233041 | 96 |
| 97 | .4191733 | . 5233181 | . 6272061 | .7308385 | 97 |
| 98 | .4234946 | .5287131 | . 6336721 | .7383730 | 98 |
| 99 | .4278160 | .5341082 | . 6401382 | . 7459074 | 99 |
| 100 | .4321374 | . 5395032 | .6466042 | .7534418 | 100 |

Logarithm of Amount of 1 at Compound Interest
TABLE NII.
$\log (1+i)^{n}$

| " | $2{ }_{O}^{\circ}$ | $21 \%$ | 21\% $\%$ | $23{ }^{3} \mathrm{C}$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0086002 | . 0096633 | . 0107239 | . 0117818 | 1 |
| 2 | . 0172003 | . 0193266 | . 0214477 | . 0235637 | 2 |
| 3 | .0258005 | . 0289900 | .0321716 | . 0353455 | 3 |
| 4 | . 0344007 | . 0386533 | . 0428955 | . 0471273 | 4 |
| 5 | . 0430009 | . 0483166 | .0536193 | . 0589092 | 5 |
| 6 | .0516010 | . 0579799 | . 0643432 | . 0706910 | 6 |
| 7 | . 0602012 | . 0676432 | . 0750671 | . 0824728 | 7 |
| 8 | . 0688014 | . 0773065 | .0857909 | . 0942546 | 8 |
| 9 | . 0774015 | . 0869699 | . 0965148 | . 1060365 | 9 |
| 10 | . 0860017 | . 0966332 | $\therefore 1072387$ | . 1178183 | 10 |
| 11 | . 0946019 | . 1062965 | . 1179625 | . 1296001 | 11 |
| 12 | . 1032021 | . 1159598 | . 1286864 | . 1413820 | 12 |
| 13 | .1118022 | . 1256231 | .1394103 | . 1531638 | 13 |
| 14 | .1204024 | . 1352864 | .1501341 | . 1649456 | 14 |
| 15 | .1290026 | . 1449498 | .1608580 | .1767275 | 15 |
| 16 | .1376027 | .1546131 | .1715818 | .1885093 | 16 |
| 17 | . 1462029 | . 1642764 | . 1823057 | . 2002911 | 17 |
| 18 | .1548031 | . 1739397 | .1930296 | . 2120729 | 18 |
| 19 | .1634033 | . 1836030 | . 2037534 | . 2238548 | 19 |
| 20 | . 1720034 | . 1932663 | . 2144773 | . 2356366 | 20 |
| 21 | .1806036 | . 2029297 | .2252012 | . 2474184 | 21 |
| 22 | . 1892038 | . 2125930 | . 2359250 | . 2592003 | 22 |
| 23 | . 1978040 | . 2222563 | . 2466489 | . 2709821 | 23 |
| 24 | . 2064041 | . 2319196 | . 2573728 | . 2827639 | 24 |
| 25 | . 2150043 | .2415829 | . 2680966 | . 2945458 | 25 |
| 26 | . 2236045 | . 2512462 | .2788205 | .3063276 | 26 |
| 27 | . 2322046 | . 2609096 | . 2895444 | . 3181094 | 27 |
| 28 | . 2408048 | . 2705729 | . 3002682 | . 3298913 | 28 |
| 29 | . 2494050 | . 2802362 | . 3109921 | . 3416731 | 29 |
| 30 | . 2580052 | . 2898995 | . 3217160 | .3534549 | 30 |
| 31 | . 2666053 | . 2995628 | . 3324398 | . 3652367 | 31 |
| 32 | . 2752055 | . 3092261 | . 3431637 | . 3770186 | 32 |
| 33 | . 2838057 | . 3188894 | . 3538876 | . 3888004 | 33 |
| 34 | . 2924058 | . 3285528 | . 3646114 | .4005822 | 34 |
| 35 | .3010060 | . 3382161 | . 3753353 | .4123641 | 35 |
| 36 | . 3096062 | . 3478794 | . 3860592 | .4241459 | 36 |
| 37 | . 3182064 | . 3575427 | . 3967830 | . 4359277 | 37 |
| 38 | . 3268065 | . 3672060 | .4075069 | . 4477096 | 38 |
| 39 | .3354067 | . 3768694 | . 4182308 | . 4594914 | 39 |
| 40 | . 3440069 | .3865327 | .4289546 | . 4712732 | 40 |
| 41 | . 3526070 | . 3961960 | . 4396785 | .4830551 | 41 |
| 42 | . 3612072 | . 4058593 | .4504023 | . 4948369 | 42 |
| 43 | . 3698074 | .4155226 | .4611262 | . 5066187 | 43 |
| 44 | . 3784076 | .4251859 | .4718501 | .5184005 | 44 |
| 45 | . 3870077 | .4348493 | .4825739 | .5301824 | 45 |
| 46 | . 3956079 | . 4445126 | . 4932978 | . 5419642 | 46 |
| 47 | . 4042081 | .4541759 | . 5040217 | . 5537460 | 47 |
| 48 | .4128082 | . 4638392 | . 5147455 | . 5655279 | 48 |
| 49 | .4214084 | .4735025 | .5254694 | .5773097 | 49 |
| 50 | . 4300086 | .4831658 | .5361933 | .5890915 | 50 |

Logarithm of Amount of 1 at Compound Interest
TABLE NII.
$\log (1+i)^{n}$

| $n$ | $2 \%$ | $2{ }_{4}^{1}{ }_{C}$ | $2^{1}{ }_{2}{ }_{C}$ | $23 \%$ | " |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | . 4386088 | .4928292 | . 5469171 | . 6008734 | 51 |
| 52 | . 4472089 | .5024925 | . 5576410 | . 6126552 | 52 |
| 53 | .4558091 | .5121558 | . 5683649 | . 6244370 | 53 |
| 54 | . 4644093 | .5218191 | . 5790887 | . 6362188 | 54 |
| 55 | .4730094 | .5314824 | . 5898126 | .6480007 | 55 |
| 56 | .4816096 | . 5411457 | . 6005365 | . 6597825 | 56 |
| 57 | . 4902098 | . 5508091 | . 6112603 | . 6715643 | 57 |
| 58 | . 4988100 | . 5604724 | . 6219842 | . 6833462 | 58 |
| 59 | .5074101 | . 5701357 | .6327081 | .6951280 | 59 |
| 60 | .5160103 | . 5797990 | .6434319 | .7069098 | 60 |
| 61 | . 5246105 | . 5894623 | .6541558 | . 7186917 | 61 |
| 62 | . 5332107 | . 5991256 | . 6648797 | .7304735 | 62 |
| 63 | .5418108 | . 6087890 | .6756035 | . 7422553 | 63 |
| 64 | .5504110 | .6184523 | . 6863274 | . 7540372 | 64 |
| 65 | .5590112 | . 6281156 | . 6970513 | . 7658190 | 65 |
| 66 | . 5676113 | . 6377789 | . 7077751 | . 7776008 | 66 |
| 67 | . 5762115 | . 6474422 | . 7184990 | . 7893826 | 67 |
| 68 | . 5848117 | . 6571055 | . 7292228 | . 8011645 | 68 |
| 69 | .5934119 | . 6667689 | . 7399467 | . 8129463 | 69 |
| 70 | . 6020120 | .6764322 | .7506706 | .8247281 | 70 |
| 71 | . 6106122 | . 6860955 | . 7613944 | .8365100 | 71 |
| 72 | . 6192124 | . 6957588 | . 7721183 | . 8482918 | 72 |
| 73 | . 6278125 | .7054221 | . 7828422 | . 8600736 | 73 |
| 74 | .6364127 | . 7150854 | . 7935660 | . 8718555 | 74 |
| 75 | . 6450129 | . 7247488 | . 8042899 | .8836373 | 75 |
| 76 | .6536131 | .7344121 | . 8150138 | . 8954191 | 76 |
| 77 | . 6622132 | . 7440754 | . 8257376 | . 9072009 | 77 |
| 78 | . 6708134 | . 7537387 | .8364615 | . 9189828 | 78 |
| 79 | . 6794136 | . 7634020 | . 8471854 | .9307646 | 79 |
| 80 | .6880137 | . 7730653 | .8579092 | . 9425464 | 80 |
| 81 | . 6966139 | .7827287 | . 8686331 | . 9543283 | 81 |
| 82 | . 7052141 | . 7923920 | . 8793570 | . 9661101 | 82 |
| 83 | . 7138143 | . 8020553 | . 8900808 | . 9778919 | 83 |
| 84 | . 7224144 | . 8117186 | . 9008047 | .9896738 | 84 |
| 85 | .7310146 | .8213819 | .9115286 | 1.0014556 | 85 |
| 86 | . 7396148 | . 8310452 | . 9222524 | 1.0132374 | 86 |
| 87 | . 7482149 | . 8407086 | . 9329763 | 1.0250193 | 87 |
| 88 | . 7568151 | .8503719 | .9437002 | 1.0368011 | 88 |
| 89 | .7654153 | . 8600352 | .9544240 | 1.0485829 | 89 |
| 90 | . 7740155 | . 8696985 | .9651479 | 1.0603647 | 90 |
| 91 | . 7826156 | . 8793618 | .9758718 | 1.0721466 | 91 |
| 92 | . 7912158 | . 8890251 | . 9865956 | 1.0839284 | 92 |
| 93 | .7998160 | . 8986885 | . 9973195 | 1.0957102 | 93 |
| 94 | .8084161 | . 9083518 | 1.0080433 | 1.1074921 | 94 |
| 95 | . 8170163 | .9180151 | 1.0187672 | 1.1192739 | 95 |
| 96 | . 8256165 | . 9276784 | 1.0294911 | 1.1310557 | 96 |
| 97 | .8342167 | . 9373417 | 1.0402149 | 1.1428376 | 97 |
| 98 | . 8428168 | . 9470050 | 1.0509388 | 1.1546194 | 98 |
| 99 | .8514170 | . 9566684 | 1.0616627 | 1.1664012 | 99 |
| 100 | .8600172 | .9663317 | 1.0723865 | 1.1781831 | 100 |

Logarithm of Amount of I at Compound Interest

TABLE XII.
$\log (I+i)^{n}$

| n | $3 \%$ | $3 \%$ | $4{ }_{0}$ | $412 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0128372 | . 0149403 | . 0170333 | . 0191163 | 1 |
| 2 | . 0256744 | . 0298807 | . 0340667 | . 0382326 | 2 |
| 3 | .0385117 | . 0448210 | .0511000 | . 0573489 | 3 |
| 4 | . 0513489 | . 0597614 | . 0681334 | . 0764652 | 4 |
| 5 | . 0641861 | . 0747017 | . 0851667 | . 0955815 | 5 |
| 6 | . 0770233 | .0896421 | . 1022000 | . 1146977 | 6 |
| 7 | . 0898606 | . 1045824 | . 1192334 | .1338140 | 7 |
| 8 | .1026978 | . 1195228 | . 1362667 | .1529303 | 8 |
| 9 | . 1155350 | . 1344631 | . 1533001 | . 1720466 | 9 |
| 10 | . 1283722 | .1494035 | . 1703334 | .1911629 | 10 |
| 11 | . 1412095 | . 1643438 | . 1873667 | . 2102792 | 11 |
| 12 | . 1540467 | . 1792842 | . 2044001 | . 2293955 | 12 |
| 13 | . 1668839 | . 1942245 | . 2214334 | . 2485118 | 13 |
| 14 | .1797211 | . 2091649 | . 2384668 | . 2676281 | 14 |
| 15 | . 1925584 | . 2241052 | . 2555001 | . 2867444 | 15 |
| 16 | . 2053956 | . 2390456 | . 2725334 | . 3058606 | 16 |
| 17 | . 2182328 | . 2539859 | . 2895668 | . 3249769 | 17 |
| 18 | . 2310700 | . 2689263 | . 3066001 | . 3440932 | 18 |
| 19 | . 2439073 | . 2838666 | . 3236334 | . 3632095 | 19 |
| 20 | . 2567445 | .2988070 | . 3406668 | . 3823258 | 20 |
| 21 | . 2695817 | . 3137473 | . 3577001 | .4014421 | 21 |
| 22 | . 2824189 | . 3286877 | . 3747335 | . 4205584 | 22 |
| 23 | . 2952562 | . 3436280 | . 3917668 | . 4396747 | 23 |
| 24 | . 3080934 | . 3585684 | .4088001 | .4587910 | 24 |
| 25 | . 3209306 | . 3735087 | .4258335 | . 4779073 | 25 |
| 26 | . 3337678 | . 3884491 | .4428668 | .4970236 | 26 |
| 27 | . 3466051 | . 4033894 | . 4599002 | .5161398 | 27 |
| 28 | . 3594423 | . 4183298 | . 4769335 | . 5352561 | 28 |
| 29 | . 3722795 | . 4332701 | .4939668 | . 5543724 | 29 |
| 30 | .3851167 | . 4482105 | .5110002 | .5734887 | 30 |
| 31 | . 3979540 | .4631508 | .5280335 | . 5926050 | 31 |
| 32 | . 4107912 | . 4780912 | . 5450669 | . 6117213 | 32 |
| 33 | . 4236284 | . 4930315 | . 5621002 | . 6308376 | 33 |
| 34 | . 4364656 | . 5079719 | . 5791335 | . 6499539 | 34 |
| 35 | .4493029 | . 5229122 | .5961669 | . 6690702 | 35 |
| 36 | . 4621401 | . 5378526 | . 6132002 | . 6881865 | 36 |
| 37 | . 4749773 | . 5527929 | . 6302336 | . 7073027 | 37 |
| 38 | . 4878145 | . 5677333 | . 6472669 | . 7264190 | 38 |
| 39 | . 5006518 | . 5826736 | . 6643002 | . 7455353 | 39 |
| 40 | . 5134890 | .5976140 | .6813336 | . 7646516 | 40 |
| 41 | . 5263262 | . 6125543 | .6983669 | . 7837679 | 41 |
| 42 | . 5391634 | . 6274947 | . 7154003 | . 8028842 | 42 |
| 43 | . 5520007 | . 6424350 | . 7324336 | . 8220005 | 43 |
| 44 | . 5648379 | . 6573754 | . 7494669 | .8411168 | 44 |
| 45 | . 5776751 | . 6723157 | .7665003 | .8602331 | 45 |
| 46 | . 5905123 | . 6872561 | . 7835336 | . 8793494 | 46 |
| 47 | . 6033496 | . 7021964 | . 8005669 | . 8984656 | 47 |
| 48 | . 6161868 | . 7171368 | . 8176003 | . 9175819 | 48 |
| 49 | . 6290240 | .7320771 | . 8346336 | .9366982 | 49 |
| 50 | . 6418612 | . 7470175 | $.8516670^{*}$ | . 9558145 | 50 |

## Logarithm of Amount of 1 per Annum at Compound Interest

TABLE XII.
$\log (1+i)^{n}$

| $n$ | $3 \%$ | $3 \frac{1}{2} \%$ | $4 \%$ | $1{ }_{2}^{1} \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | .6546985 | . 7619578 | . 8687003 | . 9749308 | 51 |
| 52 | . 6675357 | . 7768982 | .8857336 | .9940471 | 52 |
| 53 | . 6803729 | .7918385 | . 9027670 | 1.0131634 | 53 |
| 54 | .6932101 | .8067789 | . 9198003 | 1.0322797 | 54 |
| 55 | .7060474 | .8217192 | .9368337 | 1.0513960 | 55 |
| 56 | . 7188846 | . 8366596 | . 9538670 | 1.0705123 | 56 |
| 57 | . 7317218 | . 8515999 | . 9709003 | 1.0896286 | 57 |
| 58 | . 7445590 | . 8665403 | . 9879337 | 1.1087448 | 58 |
| 59 | . 7573963 | .8814806 | 1.0049670 | 1.1278611 | 59 |
| 60 | . 7702335 | .8964210 | 1.0220004 | 1.1469774 | 60 |
| 61 | . 7830707 | .9113613 | 1.0390337 | 1.1660937 | 61 |
| 62 | .7959079 | .9263017 | 1.0560670 | 1.1852100 | 62 |
| 63 | . 8087452 | .9412420 | 1.0731004 | 1.2043263 | 63 |
| 64 | . 8215824 | . 9561824 | 1.0901337 | 1.2234426 | 64 |
| 65 | .8344196 | .9711227 | 1.1071671 | 1.2425589 | 65 |
| 66 | . 8472568 | .9860631 | 1.1242004 | 1.2616752 | 66 |
| 67 | . 8600941 | 1.0010034 | 1.1412337 | 1.2807915 | 67 |
| 68 | .8729313 | 1.0159438 | 1.1582671 | 1.2999077 | 68 |
| 69 | . 8857685 | 1.0308841 | 1.1753004 | 1.3190240 | 69 |
| 70 | . 8986057 | 1.0458245 | 1.1923338 | 1.3381403 | 70 |
| 71 | .9114430 | 1.0607648 | 1.2093671 | 1.3572566 | 71 |
| 72 | . 9242802 | 1.0757052 | 1.2264004 | 1.3763729 | 72 |
| 73 | . 9371174 | 1.0906455 | 1.2434338 | 1.3954892 | 73 |
| 74 | . 9499546 | 1.1055859 | 1.2604671 | 1.4146055 | 74 |
| 75 | . 9627919 | 1.1205262 | 1.2775004 | 1.4337218 | 75 |
| 76 | . 9756291 | 1.1354666 | 1.2945338 | 1.4528381 | 76 |
| 77 | . 9884663 | 1.1504069 | 1.3115671 | 1.4719544 | 77 |
| 78 | 1.0013035 | 1.1653473 | 1.3286005 | 1.4910707 | 78 |
| 79 | 1.0141408 | 1.1802876 | 1.3456338 | 1.5101869 | 79 |
| 80 | 1.0269780 | 1.1952280 | 1.3626671 | 1.5293032 | 80 |
| 81 | . 0398152 | 1.2101683 | 1.3797005 | 1.5484195 | 81 |
| 82 | 1.0526524 | 1.2251087 | 1.3967338 | 1.5675358 | 82 |
| 83 | 1.0654897 | 1.2400490 | 1.4137672 | 1.5866521 | 83 |
| 84 | 1.0783269 | 1.2549894 | 1.4308005 | 1.6057684 | 84 |
| 85 | 1.0911641 | 1.2699297 | 1.4478338 | 1.6248847 | 85 |
| 86 | 1.1040013 | 1.2848701 | 1.4648672 | 1.6440010 | 86 |
| 87 | 1.1168385 | 1.2998104 | 1.4819005 | 1.6631173 | 87 |
| 88 | 1.1296758 | 1.3147508 | 1.4989339 | 1.6822336 | 88 |
| 89 | 1.1425130 | 1.3296911 | 1.5159672 | 1.7013498 | 89 |
| 90 | 1.1553502 | 1.3446315 | 1.5330005 | 1.7204661 | 90 |
| 91 | 1.1681874 | 1.3595718 | 1.5500339 | 1.7395824 | 91 |
| 92 | 1.1810247 | 1.3745122 | 1.5670672 | 1.7586987 | 92 |
| 93 | 1.1938619 | 1.3894525 | 1.5841006 | 1.7778150 | 93 |
| 94 | 1.2066991 | 1.4043929 | 1.6011339 | 1.7969313 | 94 |
| 95 | 1.2195363 | 1.4193332 | 1.6181672 | 1.8160476 | 95 |
| 96 | 1.2323736 | 1.4342736 | 1.6352006 | 1.8351639 | 96 |
| 97 | 1.2452108 | 1.4492139 | 1.6522339 | 1.8542802 | 97 |
| 98 | 1.2580480 | 1.4641543 | 1.6692673 | 1.8733965 | 98 |
| 99 | 1.2708852 | 1.4790946 | 1.6863006 | 1.8925127 | 99 |
| 100 | 1.2837225 | 1.4940350 | 1.7033339 | 1.9116290 | 100 |

Logarithm of Amount of 1 at Compound Interest

TABLE XII.
$\log (1+i)^{n}$

| " | 5 | $5 \%$ | $6 \%$ | 7\% | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0211893 | . 0232525 | . 0253059 | . 0293838 | 1 |
| 2 | . 0423786 | . 0465049 | . 0506117 | . 0587676 | 2 |
| 3 | . 0635679 | . 0697574 | . 0759176 | . 0881513 | 3 |
| 4 | . 0847572 | . 0930098 | . 1012235 | . 1175351 | 4 |
| 5 | . 1059465 | . 1162623 | . 1265293 | . 1469189 | 5 |
| 6 | . 1271358 | . 1395148 | . 1518352 | . 1763027 | 6 |
| 7 | . 1483251 | . 1627672 | . 1771411 | . 2056864 | 7 |
| 8 | . 1695144 | . 1860197 | . 2024469 | . 2350702 | 8 |
| 9 | . 1907037 | . 2092721 | . 2277528 | . 2644540 | 9 |
| 10 | .2118930 | . 2325246 | . 2530587 | . 2938378 | 10 |
| 11 | . 2330823 | . 2557771 | . 2783645 | . 3232216 | 11 |
| 12 | . 2542716 | . 2790295 | . 3036704 | . 3526053 | 12 |
| 13 | . 2754609 | . 3022820 | . 3289762 | . 3819891 | 13 |
| 14 | . 2966502 | . 3255344 | . 3542821 | . 4113729 | 14 |
| 15 | . 3178395 | . 3487869 | . 3795880 | . 4407567 | 15 |
| 16 | . 3390288 | . 3720394 | . 4048938 | . 4701404 | 16 |
| 17 | . 3602181 | . 3952918 | . 4301997 | . 4995242 | 17 |
| 18 | . 3814074 | .4185443 | .4555056 | . 5289080 | 18 |
| 19 | . 4025967 | . 4417967 | . 4808114 | . 5582918 | 19 |
| 20 | . 4237860 | .4650492 | . 5061173 | . 5876756 | 20 |
| 21 | . 4449753 | . 4883017 | . 5314232 | . 6170593 | 21 |
| 22 | . 4661646 | . 5115541 | . 5567290 | . 6464431 | 22 |
| 23 | . 4873539 | . 5348066 | . 5820349 | . 6758269 | 23 |
| 24 | . 5085432 | . 5580590 | . 6073408 | . 7052107 | 24 |
| 25 | . 5297325 | .5813115 | . 6326466 | . 7345944 | 25 |
| 26 | . 5509218 | . 6045639 | . 6579525 | . 7639782 | 26 |
| 27 | . 5721111 | . 6278164 | . 6832584 | . 7933620 | 27 |
| 28 | . 5933004 | . 6510689 | . 7085642 | . 8227458 | 28 |
| 29 | . 6144897 | . 6743213 | . 7338701 | . 8521296 | 29 |
| 30 | . 6356790 | . 6975738 | . 7591760 | . 8815133 | 30 |
| 31 | . 6568683 | . 7208262 | . 7844818 | . 9108971 | 31 |
| 32 | . 6780576 | . 7440787 | . 8097877 | . 9402809 | 32 |
| 33 | . 6992469 | . 7673312 | . 8350936 | . 9696647 | 33 |
| 34 | . 7204362 | . 7905836 | . 8603994 | . 9990484 | 34 |
| 35 | . 7416255 | . 8138361 | . 8857053 | 1.0284322 | 35 |
| 36 | . 7628148 | . 8370885 | . 9110112 | 1.0578160 | 36 |
| 37 | . 7840041 | . 8603410 | . 9363170 | 1.0871998 | 37 |
| 38 | . 8051934 | . 8835935 | . 9616229 | 1.1165836 | 38 |
| 39 | . 8263827 | . 9068459 | . 9869287 | 1.1459673 | 39 |
| 40 | . 8475720 | . 9300984 | 1.0122346 | 1.1753511 | 40 |
| 41 | . 8687613 | . 9533508 | 1.0375405 | 1.2047349 | 41 |
| 42 | . 8899506 | . 9766033 | 1.0628463 | 1.2341187 | 42 |
| 43 | . 9111399 | . 9998558 | 1.0881522 | 1.2635024 | 43 |
| 44 | . 9323292 | 1.0231082 | 1.1134581 | 1.2928862 | 44 |
| 45 | . 9535185 | 1.0463607 | 1.1387639 | 1.3222700 | 45 |
| 46 | . 9747078 | 1.0696131 | 1.1640698 | 1.3516538 | 46 |
| 47 | . 9958971 | 1.0928656 | 1.1893757 | 1.3810376 | 47 |
| 48 | 1.0170864 | 1.1161181 | 1.2146815 | 1.4104213 | 48 |
| 49 | 1.0382757 | 1.1393705 | 1.2399874 | 1.4398051 | 49 |
| 50 | 1.0594650 | 1.1626230 | 1.2652933 | 1.4691889 | 50 |

Logarithm of Amount of 1 at Compound Interest
TABLE XII.
$\log (1+i)^{n}$

| $n$ | $5 \%$ | 5\% $\%$ | 6\% | $7_{0}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.0806543 | 1.1858754 | 1.2905991 | 1.4985727 | 51 |
| 52 | 1.1018436 | 1.2091279 | 1.3159050 | 1.5279564 | 52 |
| 53 | 1.1230329 | 1.2323804 | 1.3412109 | 1.5573402 | 53 |
| 54 | 1.1442222 | 1.2556328 | 1.3665167 | 1.5867240 | 54 |
| 55 | 1.1654115 | 1.2788853 | 1.3918226 | 1.6161078 | 55 |
| 56 | 1.1866007 | 1.3021377 | 1.4171285 | 1.6454916 | 56 |
| 57 | 1.2077900 | 1.3253902 | 1.4424343 | 1.6748753 | 57 |
| 58 | 1.2289793 | 1.3486427 | 1.4677402 | 1.7042591 | 58 |
| 59 | 1.2501686 | 1.3718951 | 1.4930461 | 1.7336429 | 59 |
| 60 | 1.2713579 | 1.3951476 | 1.5183519 | 1.7630267 | 60 |
| 61 | 1.2925472 | 1.4184000 | 1.5436578 | 1.7924104 | 61 |
| 62 | 1.3137365 | 1.4416525 | 1.5689636 | 1.8217942 | 62 |
| 63 | 1.3349258 | 1.4649050 | 1.5942695 | 1.8511780 | 63 |
| 64 | 1.3561151 | 1.4881574 | 1.6195754 | 1.8805618 | 64 |
| 65 | 1.3773044 | 1.5114099 | 1.6448812 | 1.9099456 | 65 |
| 66 | 1.3984937 | 1.5346623 | 1.6701871 | 1.9393293 | 66 |
| 67 | 1.4196830 | 1.5579148 | 1.6954930 | 1.6987131 | 67 |
| 68 | 1.4408723 | 1.5811673 | 1.7207988 | 1.9980969 | 68 |
| 69 | 1.4620616 | 1.6044197 | 1.7461047 | 2.0274807 | 69 |
| 70 | 1.4832509 | 1.6276722 | 1.7714106 | 2.0568644 | 70 |
| 71 | 1.5044402 | 1.6509246 | 1.7967164 | 2.0862482 | 71 |
| 72 | 1.5256295 | 1.6741771 | 1.8220223 | 2.1156320 | 72 |
| 73 | 1.5468188 | 1.6974296 | 1.8473282 | 2.1450158 | 73 |
| 74 | 1.5680081 | 1.7206820 | 1.8726340 | 2.1743995 | 74 |
| 75 | !.589 1974 | 1.7439345 | 1.8979399 | 2.2037833 | 75 |
| 76 | 1.6103867 | 1.7671869 | 1.9232458 | 2.2331671 | 76 |
| 77 | 1.6315760 | 1.7904394 | 1.9485516 | 2.2625509 | 77 |
| 78 | 1.6527653 | 1.8136918 | 1.9738575 | 2.2919347 | 78 |
| 79 | 1.6739546 | 1.8369443 | 1.9991634 | 2.3213184 | 79 |
| 80 | 1.6951439 | 1.8601968 | 2.0244692 | 2.3507022 | 80 |
| 81 | 1.7163332 | 1.8834492 | 2.0497751 | 2.3800860 | 81 |
| 82 | 1.7375225 | 1.9067017 | 2.0750810 | 2.4094698 | 82 |
| 83 | 1.7587118 | 1.9299541 | 2.1003868 | 2.4388535 | 83 |
| 84 | 1.7799011 | 1.9532066 | 2.1256927 | 2.4682373 | 84 |
| 85 | 1.8010904 | 1.9764591 | 2.1509986 | 2.4976211 | 85 |
| 86 | 1.8222797 | 1.9997115 | 2.1763044 | 2.5270049 | 86 |
| 87 | 1.8434690 | 2.0229640 | 2.2016103 | 2.5563887 | 87 |
| 88 | 1.8646583 | 2.0462164 | 2.2269161 | 2.5857724 | 88 |
| 89 | 1.8858476 | 2.0694689 | 2.2522220 | 2.6151562 | 89 |
| 90 | 1.9070369 | 2.0927214 | 2.2775279 | 2.6445400 | 90 |
| 91 | 1.9282262 | 2.1159738 | 2.3028337 | 2.6739238 | 91 |
| 92 | 1.9494155 | 2.1392263 | 2.3281396 | 2.7033075 | 92 |
| 93 | 1.9706048 | 2.1624787 | 2.3534455 | 2.7326313 | 93 |
| 94 | 1.9917941 | 2.1857312 | 2.3787513 | 2.7620751 | 94 |
| 95 | 2.0129834 | 2.2089837 | 2.4040572 | 2.7914589 | 95 |
| 96 | 2.0341727 | 2.2322361 | 2.4293631 | 2.8208427 | 96 |
| 97 | 2.0553620 | 2.2554886 | 2.4546689 | 2.8502264 | 97 |
| 98 | 2.0765513 | 2.2787410 | 2.4799748 | 2.8796102 | 98 |
| 99 | 2.0977406 | 2.3019935 | 2.5052807 | 2.9089940 | 99 |
| 100 | 2.1189299 | 2.3252460 | 2.5305865 | 2.9383778 | 100 |

TABLE XIII.
$\log s_{\bar{n}}$

| $n$ | $1 \%$ | $11 \%$ | 1\%\% | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0000000 | . 0000000 | . 0000000 | . 0000000 | 1 |
| 2 | . 3031961 | .3037359 | . 3042751 | .3048135 | 2 |
| 3 | .4814570 | .4825386 | .4836194 | . 4846993 | 3 |
| 4 | . 6085689 | . 6101944 | .6118193 | .6134433 | 4 |
| 5 | .7076557 | .7098270 | .7119983 | .7141695 | 5 |
| 6 | .7890173 | .7917365 | . 7944568 | . 7971779 | 6 |
| 7 | . 8581481 | . 8614171 | . 8646887 | . 8679627 | 7 |
| 8 | . 9183277 | . 9221484 | .9259738 | .9298036 | 8 |
| 9 | .9716713 | . 9760460 | .9804275 | .9848157 | 9 |
| 10 | 1.0196234 | 1.0245542 | 1.0294943 | 1.0344439 | 10 |
| 11 | 1.0632145 | 1.0687029 | 1.0742041 | 1.0797182 | 11 |
| 12 | 1.1032049 | 1.1092531 | 1.1153179 | 1.1213991 | 12 |
| 13 | 1.1401725 | 1.1467827 | 1.1534133 | 1.1600644 | 13 |
| 14 | 1.1745662 | 1.1817401 | 1.1889392 | 1.1961633 | 14 |
| 15 | 1.2067422 | 1.2144819 | 1.2222517 | 1.2300515 | 15 |
| 16 | 1.2369870 | 1.2452944 | 1.2536377 | 1.2620160 | 16 |
| 17 | 1.2655356 | 1.2744130 | 1.2833319 | 1.2922917 | 17 |
| 18 | 1.2925827 | 1.3020318 | 1.3115288 | 1.3210728 | 18 |
| 19 | 1.3182908 | 1.3283137 | 1.3383910 | 1.3485222 | 19 |
| 20 | 1.3427976 | 1.3533964 | 1.3640567 | 1.3747779 | 20 |
| 21 | 1.3662209 | 1.3773976 | 1.3886432 | 1.3999572 | 21 |
| 22 | 1.3886622 | 1.4004184 | 1.4122518 | 1.4241615 | 22 |
| 23 | 1.4102084 | 1.4225466 | 1.4349702 | 1.4474783 | 23 |
| 24 | 1.4309367 | 1.4438585 | 1.4568748 | 1.4699841 | 24 |
| 25 | 1.4509138 | 1.4644214 | 1.4780326 | 1.4917462 | 25 |
| 26 | 1.4701991 | 1.4842945 | 1.4985031 | 1.5128237 | 26 |
| 27 | 1.4888451 | 1.5035301 | 1.5183387 | 1.5332689 | 27 |
| 28 | 1.5068985 | 1.5221752 | 1.5375859 | 1.5531287 | 28 |
| 29 | 1.5244012 | 1.5402716 | 1.5562868 | 1.5724451 | 29 |
| 30 | 1.5413906 | 1.5578567 | 1.5744790 | 1.5912556 | 30 |
| 31 | 1.5579008 | 1.5749646 | 1.5921964 | 1.6095939 | 31 |
| 32 | 1.5739626 | 1.5916259 | 1.6094694 | 1.6274908 | 32 |
| 33 | 1.5896035 | 1.6078683 | 1.6263261 | 1.6449741 | 33 |
| 34 | 1.6048489 | 1.6237174 | 1.6427918 | 1.6620692 | 34 |
| 35 | 1.6197222 | 1.6391962 | 1.6588895 | 1.6787990 | 35 |
| 36 | 1.6342442 | 1.6543258 | 1.6746404 | 1.6951850 | 36 |
| 37 | 1.6484346 | 1.6691256 | 1.6900641 | 1.7112464 | 37 |
| 38 | 1.6623112 | 1.6836137 | 1.7051782 | 1.7270011 | 38 |
| 39 | 1.6758905 | 1.6978065 | 1.7199995 | 1.7424656 | 39 |
| 40 | 1.6891878 | 1.7117192 | 1.7345430 | 1.7576552 | 40 |
| 41 | 1.7022171 | 1.7253657 | 1.7488228 | 1.7725837 | 41 |
| 42 | 1.7149915 | 1.7387594 | 1.7628521 | 1.7872646 | 42 |
| 43 | 1.7275232 | 1.7519124 | 1.7766430 | 1.8017097 | 43 |
| 44 | 1.7398235 | 1.7648359 | 1.7902068 | 1.8159306 | 44 |
| 45 | 1.7519029 | 1.7775405 | 1.8035541 | 1.8299376 | 45 |
| 46 | 1.7637714 | 1.7900361 | 1.8166947 | 1.8437407 | 46 |
| 47 | 1.7754381 | 1.8023320 | 1.8296378 | 1.8573490 | 47 |
| 48 | 1.7869118 | 1.8144366 | 1.8423922 | 1.8707712 | 48 |
| 49 | 1.7982004 | 1.8263582 | 1.8549658 | 1.8840154 | 49 |
| 50 | 1.8093117 | 1.8381043 | 1.8673663 | 1.8970893 | 50 |

Logarithm of Amount of 1 per Annum at Compound Interest
TABLE XIII.
$\log s_{\bar{n}}$

| $n$ | $1 \%$ | 1\%\% | $11 / 2 \%$ | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.8202527 | 1.8496823 | 1.8796008 | 1.9099997 | 51 |
| 52 | 1.8310303 | 1.8610987 | 1.8916761 | 1.9227538 | 52 |
| 53 | 1.8416508 | 1.8723599 | 1.9035987 | 1.9353576 | 53 |
| 54 | 1.8521203 | 1.8834719 | 1.9153743 | 1.9478173 | 54 |
| 55 | 1.8624442 | 1.8944404 | 1.9270088 | 1.9601384 | 55 |
| 56 | 1.8726280 | 1.9052708 | 1.9385074 | 1.9723263 | 56 |
| 57 | 1.8826770 | 1.9159681 | 1.9498752 | 1.9843862 | 57 |
| 58 | 1.8925957 | 1.9265372 | 1.9611172 | 1.9963227 | 58 |
| 59 | 1.9023888 | 1.9369827 | 1.9722377 | 2.0081405 | 59 |
| 60 | 1.9120608 | 1.9473087 | 1.9832412 | 2.0198438 | 60 |
| 61 | 1.9216156 | 1.9575196 | 1.9941317 | 2.0314367 | 61 |
| 62 | 1.9310570 | 1.9676191 | 2.0049130 | 2.0429234 | 62 |
| 63 | 1.9403892 | 1.9776111 | 2.0155894 | 2.0543073 | 63 |
| 64 | 1.9496153 | 1.9874990 | 2.0261637 | 2.0655920 | 64 |
| 65 | 1.0587389 | 1.9972864 | 2.0366400 | 2.0767809 | 65 |
| 66 | 1.9677632 | 2.0069762 | 2.0470208 | 2.0878773 | 66 |
| 67 | 1.9766914 | 2.0165720 | 2.0573096 | 2.0988841 | 67 |
| 68 | 1.9855262 | 2.0260762 | 2.0675094 | 2.1098045 | 68 |
| 69 | 1.9942706 | 2.0354921 | 2.0776229 | 2.1206410 | 69 |
| 70 | 2.0029272 | 2.0448218 | 2.0876529 | 2.1313966 | 70 |
| 71 | 2.0114990 | 2.0540685 | 2.0976015 | 2.1427033 | 71 |
| 72 | 2.0199877 | 2.0632342 | 2.1074718 | 2.1526744 | 72 |
| 73 | 2.0283964 | 2.0723216 | 2.1172659 | 2.1632016 | 73 |
| 74 | 2.0367270 | 2.0813329 | 2.1269858 | 2.1736573 | 74 |
| 75 | 2.0449818 | 2.0902704 | 2.1366343 | 2.1840440 | 75 |
| 76 | 2.0531629 | 2.0991358 | 2.1462130 | 2.1943633 | 76 |
| 77 | 2.0612722 | 2.1079313 | 2.1557240 | 2.2046174 | 77 |
| 78 | 2.0693117 | 2.1166591 | 2.1651692 | 2.2148083 | 78 |
| 79 | 2.0772836 | 2.1253208 | 2.1745505 | 2.2249376 | 79 |
| 80 | 2.0851888 | 2.1339180 | 2.1838700 | 2.2350075 | 80 |
| 81 | 2.0930300 | 2.1424529 | 2.1931287 | 2.2450193 | 81 |
| 82 | 2.1008084 | 2.1509267 | 2.2023289 | 2.2549749 | 82 |
| 83 | 2.1085257 | 2.1593415 | 2.2114721 | 2.2648758 | 83 |
| 84 | 2.1161835 | 2.1676983 | 2.2205594 | 2.2747234 | 84 |
| 85 | 2.1237830 | 2.1759991 | 2.2295928 | 2.2845194 | 85 |
| 86 | 2.1313260 | 2.1842449 | 2.2385735 | 2.2942649 | 86 |
| 87 | 2.1388137 | 2.1924372 | 2.2475028 | 2.3039616 | 87 |
| 88 | 2.1462474 | 2.2005774 | 2.2563822 | 2.3136106 | 88 |
| 89 | 2.1536286 | 2.2086670 | 2.2652127 | 2.3232132 | 89 |
| 90 | 2.1609584 | 2.2167068 | 2.2739958 | 2.3327707 | 90 |
| 91 | 2.1682378 | 2.2246982 | 2.2827326 | 2.3422845 | 91 |
| 92 | 2.1754683 | 2.2326426 | 2.2914246 | 2.3517553 | 92 |
| 93 | 2.1826511 | 2.2405407 | 2.3000724 | 2.3611844 | 93 |
| 94 | 2.1897869 | 2.2483941 | 2.3086772 | 2.3705730 | 94 |
| 95 | 2.1968771 | 2.2562033 | 2.3172401 | 2.3799219 | 95 |
| 96 | 2.2039226 | 2.2639698 | 2.3257623 | 2.3892323 | 96 |
| 97 | 2.2109244 | 2.2716943 | 2.3342445 | 2.3985051 | 97 |
| 98 | 2.2178833 | 2.2793778 | 2.3426881 | 2.4077413 | 98 |
| 99 | 2.2248005 | 2.2870213 | 2.3510935 | 2.4169417 | 99 |
| 100 | 2.2316769 | 2.2946255 | 2.3594617 | 2.4261073 | 100 |

Logarithm of Amount of 1 per Annum at Compound Interest
TABLE XIII.
$\log s_{\bar{n}}$

| n | $2^{\circ}$ | $214 \%$ | $21 \%$ | $23 \%$ | n |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0000000 | . 0000000 | . 0000000 | . 0000000 | 1 |
| 2 | . 3053514 | . 3058885 | .3064250 | . 3069609 | 2 |
| 3 | . 4857782 | .4868563 | .4879334 | . 4890096 | 3 |
| 4 | . 6150666 | . 6166893 | . 6183112 | . 6199325 | 4 |
| 5 | . 7163407 | . 7185116 | .7206825 | . 7228532 | 5 |
| 6 | . 7999000 | . 8026230 | .8053470 | . 8080718 | 6 |
| 7 | . 8712391 | . 8745179 | . 8777991 | . 8810826 | 7 |
| 8 | .9336376 | . 9374759 | . 9413184 | . 9451651 | 8 |
| 9 | . 9892107 | . 9936123 | .9980203 | 1.0024348 | 9 |
| 10 | 1.0394030 | 1.0443715 | 1.0493491 | 1.0543359 | 10 |
| 11 | 1.0852447 | 1.0907838 | 1.0963352 | 1.1018988 | 11 |
| 12 | 1.1274964 | 1.1336099 | 1.1397391 | 1.1458840 | 12 |
| 13 | 1.1667359 | 1.1734273 | 1.9801386 | 1.1868694 | 13 |
| 14 | 1.2034120 | 1.2106852 | 1.2179825 | 1.2253038 | 14 |
| 15 | 1.2378808 | 1.2457394 | 1.2536269 | 1.2615431 | 15 |
| 16 | 1.2704292 | 1.2788770 | 1.2873588 | 1.2958744 | 16 |
| 17 | 1.3012920 | 1.3103325 | 1.3194128 | 1.3285323 | 17 |
| 18 | 1.3306635 | 1.3403006 | 1.3499833 | 1.3597112 | 18 |
| 19 | 1.3587067 | 1.3689439 | 1.3792331 | 1.3895739 | 19 |
| 20 | 1.3855593 | 1.3964002 | 1.4073001 | 1.4182582 | 20 |
| 21 | 1.4113388 | 1.4227873 | 1.4343018 | 1.4458816 | 21 |
| 22 | 1.4361465 | 1.4482061 | 1.4603393 | 1.4725454 | 22 |
| 23 | 1.4600699 | 1.4727443 | 1.4855004 | 1.4983370 | 23 |
| 24 | 1.4831858 | 1.4964786 | 1.5098614 | 1.5233331 | 24 |
| 25 | 1.5055610 | 1.5194752 | 1.5334894 | 1.5476005 | 25 |
| 26 | 1.5272548 | 1.5417953 | 1.5564437 | 1.5711986 | 26 |
| 27 | 1.5483197 | 1.5634895 | 1.5787767 | 1.5941798 | 27 |
| 28 | 1.5688024 | 1.5846051 | 1.6005351 | 1.6165907 | 28 |
| 29 | 1.5887448 | 1.6051840 | 1.6217608 | 1.6384733 | 29 |
| 30 | 1.6081844 | 1.6252637 | 1.6424913 | 1.6598650 | 30 |
| 31 | 1.6271552 | 1.6448781 | 1.6627604 | 1.6807996 | 31 |
| 32 | 1.6456878 | 1.6640580 | 1.6825988 | 1.7013078 | 32 |
| 33 | 1.6638099 | 1.6828308 | 1.7020343 | 1.7214173 | 33 |
| 34 | 1.6815470 | 1.7012223 | 1.7210921 | 1.7411534 | 34 |
| 35 | 1.6989221 | 1.7192552 | 1.7397954 | 1.7605392 | 35 |
| 36 | 1.7159563 | 1.7369510 | 1.7581653 | 1.7795959 | 36 |
| 37 | 1.7326692 | 1.7543287 | 1.7762212 | 1.7983426 | 37 |
| 38 | 1.7490785 | 1.7714065 | 1.7939810 | 1.8167975 | 38 |
| 39 | 1.7652008 | 1.7882007 | 1.8114610 | 1.8349767 | 39 |
| 40 | 1.7810512 | 1.8047266 | 1.8286763 | 1.8528954 | 40 |
| 41 | 1.7966439 | 1.8209981 | 1.8456413 | 1.8705679 | 41 |
| 42 | 1.8119918 | 1.8370285 | 1.8623688 | 1.8880070 | 42 |
| 43 | 1.8271072 | 1.8528296 | 1.8788710 | 1.9052247 | 43 |
| 44 | 1.8420014 | 1.8684131 | 1.8951590 | 1.9222325 | 44 |
| 45 | 1.8566849 | 1.8837892 | 1.9112436 | 1.9390407 | 45 |
| 46 | 1.8711674 | 1.8989678 | 1.9271344 | 1.9556591 | 46 |
| 47 | 1.8854583 | 1.9139582 | 1.9428405 | 1.9720969 | 47 |
| 48 | 1.8995662 | 1.9287689 | 1.9583707 | 1.9883627 | 48 |
| 49 | 1.9134991 | 1.9434080 | 1.9737330 | 2.0044645 | 49 |
| 50 | 1.9272646 | 1.9578831 | 1.9889349 | 2.0204098 | 50 |

Logarithm of Amount of 1 per Annum at Compound Interest
TABLE XIII.
$\log s_{m}$

| $n$ | $\mathbf{2} \%$ | 21\% | 21.4 | $23 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.9408699 | 1.9722013 | 2.0039836 | 2.0362055 | 51 |
| 52 | 1.9543216 | 1.9863693 | 2.0188855 | 2.0518588 | 52 |
| 53 | 1.9676262 | 2.0003935 | 2.0336473 | 2.0673755 | 53 |
| 54 | 1.9807897 | 2.0142798 | 2.0482747 | 2.0827617 | 54 |
| 55 | 1.9938175 | 2.0280337 | 2.0627734 | 2.0980228 | 55 |
| 56 | 2.0067153 | 2.0416607 | 2.0771487 | 2.1131642 | 56 |
| 57 | 2.0194877 | 2.0551657 | 2.0914055 | 2.1281910 | 57 |
| 58 | 2.0321399 | 2.0685539 | 2.1055487 | 2.1431081 | 58 |
| 59 | 2.0446761 | 2.0818292 | 2.1195828 | 2.1579195 | 59 |
| 60 | 2.0571012 | 2.0949962 | 2.1335121 | 2.1726294 | 60 |
| 61 | 2.0694186 | 2.1080594 | 2.1473405 | 2.1872425 | 61 |
| 62 | 2.0816324 | 2.1210217 | 2.1610720 | 2.2017622 | 62 |
| 63 | 2.0937466 | 2.1338877 | 2.1747100 | 2.2161920 | 63 |
| 64 | 2.1057645 | 2.1466603 | 2.1882583 | 2.2305355 | 64 |
| 65 | 2.1176894 | 2.1593433 | 2.2017201 | 2.2447960 | 65 |
| 66 | 2.1295246 | 2.1719397 | 2.2150987 | 2.2589766 | 66 |
| 67 | 2.1412731 | 2.1844523 | 2.2283970 | 2.2730805 | 67 |
| 68 | 2.1529377 | 2.1968843 | 2.2416177 | 2.2871103 | 68 |
| 69 | 2.1645217 | 2.2092386 | 2.2547640 | 2.3010688 | 69 |
| 70 | 2.1760272 | 2.2215175 | 2.2678381 | 2.3149587 | 70 |
| 71 | 2.1874572 | 2.2337238 | 2.2808427 | 2.3287825 | 71 |
| 72 | 2.1988137 | 2.2458597 | 2.2937803 | 2.3425422 | 72 |
| 73 | 2.2100995 | 2.2579278 | 2.3066531 | 2.3562406 | 73 |
| 74 | 2.2213164 | 2.2699299 | 2.3194631 | 2.3698796 | 74 |
| 75 | 2.2324669 | 2.2818688 | 2.3322127 | 2.3834611 | 75 |
| 76 | 2.2435529 | 2.2937458 | 2.3449038 | 2.3969875 | 76 |
| 77 | 2.2545765 | 2.3055634 | 2.3575385 | 2.4104603 | 77 |
| 78 | 2.2655394 | 2.3173233 | 2.3701183 | 2.4238818 | 78 |
| 79 | 2.2764436 | 2.3290273 | 2.3826455 | 2.4372533 | 79 |
| 80 | 2.2872909 | 2.3406772 | 2.3951213 | 2.4505768 | 80 |
| 81 | 2.2980829 | 2.3522745 | 2.4075477 | 2.4638537 | 81 |
| 82 | 2.3088212 | 2.3638211 | 2.4199261 | 2.4770857 | 82 |
| 83 | 2.3195074 | 2.3753183 | 2.4322581 | 2.4902743 | 83 |
| 84 | 2.3301429 | 2.3867678 | 2.4445453 | 2.5034208 | 84 |
| 85 | 2.3407294 | 2.3981708 | 2.4567888 | 2.5165268 | 85 |
| 86 | 2.3512681 | 2.4095289 | 2.4689901 | 2.5295934 | 86 |
| 87 | 2.3617606 | 2.4208433 | 2.4811507 | 2.5426220 | 87 |
| 88 | 2.3722079 | 2.4321153 | 2.4932716 | 2.5556138 | 88 |
| 89 | 2.3826114 | 2.4433462 | 2.5053541 | 2.5685700 | 89 |
| 90 | 2.3929723 | 2.4545370 | 2.5173995 | 2.5814917 | 90 |
| 91 | 2.4032917 | 2.4656893 | 2.5294086 | 2.5943801 | 91 |
| 92 | 2.4135710 | 2.4768037 | 2.5413828 | 2.6072361 | 92 |
| 93 | 2.4238109 | 2.4878815 | 2.5533231 | 2.6200608 | 93 |
| 94 | 2.4340127 | 2.4989237 | 2.5652303 | 2.6328552 | 84 |
| 95 | 2.4441776 | 2.5099314 | 2.5771058 | 2.6456203 | 95 |
| 96 | 2.4543061 | 2.5209055 | 2.5889500 | 2.6583569 | 96 |
| 97 | 2.4643995 | 2.5318470 | 2.6007642 | 2.6710660 | 97 |
| 98 | 2.4744586 | 2.5427567 | 2.6125493 | 2.6837484 | 98 |
| 99 | 2.4844844 | 2.5536355 | 2.6243059 | 2.6964047 | 99 |
| 100 | 2.4944777 | 2.5644843 | 2.6360350 | 2.7090361 | 100 |

Logarithm of Amount of 1 Per Annum at Compound Interest

TABLE XIII.
$\log s_{\bar{n}}$

| $n$ | 3\% | $3 \%$ | $4 \%$ | 4\% $\%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0000000 | . 0000000 | . 0000000 | . 0000000 | 1 |
| 2 | . 3074960 | . 3085644 | . 3096302 | . 3106933 | 2 |
| 3 | .4900850 | .4922329 | .4943773 | . 4965180 | 3 |
| 4 | . 6215530 | . 6247917 | . 6280274 | . 6312602 | 4 |
| 5 | . 7250238 | . 7293645 | . 7337045 | .7380437 | 5 |
| 6 | . 8107976 | . 8162513 | .8217084 | . 8271684 | 6 |
| 7 | .8843683 | . 8909465 | . 8975333 | . 9041284 | 7 |
| 8 | . 9490159 | .9567296 | . 9644588 | . 9722034 | 8 |
| 9 | 1.0068555 | 1.0157158 | 1.0246004 | 1.0335088 | 9 |
| 10 | 1.0593316 | 1.0693496 | 1.0794022 | 1.0894886 | 10 |
| 11 | 1.1074744 | 1.1186612 | 1.1298945 | 1.1411731 | 11 |
| 12 | 1.1520445 | 1.1644112 | 1.1768378 | 1.1893227 | 12 |
| 13 | 1.1936196 | 1.2071772 | 1.2208097 | 1.2345151 | 13 |
| 14 | 1.2326486 | 1.2474083 | 1.2622591 | 1.2771990 | 14 |
| 15 | 1.2694876 | 1.2854601 | 1.3015419 | 1.3177302 | 15 |
| 16 | 1.3044233 | 1.3216197 | 1.3389450 | 1.3563956 | 16 |
| 17 | 1.3376906 | 1.3561218 | 1.3747028 | 1.3934296 | 17 |
| 18 | 1.3694837 | 1.3891606 | 1.4090097 | 1.4290265 | 18 |
| 19 | 1.3999655 | 1.4208990 | 1.4420285 | 1.4633488 | 19 |
| 20 | 1.4292737 | 1.4514745 | 1.4738966 | 1.4965342 | 20 |
| 21 | 1.4575259 | 1.4810048 | 1.5047318 | 1.5287000 | 21 |
| 22. | 1.4848233 | 1.5095910 | 1.5346348 | 1.5599470 | 22 |
| 23 | 1.5112533 | 1.5373205 | 1.5636933 | 1.5903628 | 23 |
| 24 | 1.5368925 | 1.5642698 | 1.5919835 | 1.6200235 | 24 |
| 25 | 1.5618079 | 1.5905059 | 1.6195723 | 1.6489960 | 25 |
| 26 | 1.5860587 | 1.6160878 | 1.6465189 | 1.6773391 | 26 |
| 27 | 1.6096972 | 1.6410680 | 1.6728754 | 1.7051050 | 27 |
| 28 | 1.6327702 | 1.6654931 | 1.6986883 | 1.7323402 | 28 |
| 29 | 1.6553195 | 1.6894047 | 1.7239995 | 1.7590861 | 29 |
| 30 | 1.6773826 | 1.7128405 | 1.7488462 | 1.7853802 | 30 |
| 31 | 1.6989934 | 1.7358342 | 1.7732621 | 1.8112558 | 31 |
| 32 | 1.7201821 | 1.7584160 | 1.7972777 | 1.8367433 | 32 |
| 33 | 1.7409769 | 1.7806141 | 1.8209205 | 1.8618702 | 33 |
| 34 | 1.7614029 | 1.8024532 | 1.8442155 | 1.8866613 | 34 |
| 35 | 1.7814831 | 1.8239566 | 1.8671858 | 1.9111396 | 35 |
| 36 | 1.8012386 | 1.8451452 | 1.8898523 | 1.9353257 | 36 |
| 37 | 1.8206888 | 1.8660383 | 1.9122340 | 1.9592387 | 37 |
| 38 | 1.8398515 | 1.8866537 | 1.9343486 | 1.9828960 | 38 |
| 39 | 1.8587431 | 1.9070076 | 1.9562124 | 2.0063138 | 39 |
| 40 | 1.8773786 | 1.9271150 | 1.9778402 | 2.0295068 | 40 |
| 41 | 1.8957721 | 1.9469900 | 1.9992460 | 2.0524889 | 41 |
| 42 | 1.9139366 | 1.9666455 | 2.0204425 | 2.0752724 | 42 |
| 43 | 1.9318843 | 1.9860935 | 2.0414416 | 2.0978692 | 43 |
| 44 | 1.9496262 | 2.0053449 | 2.0622543 | 2.1202903 | 44 |
| 45 | 1.9671727 | 2.0244104 | 2.0828908 | 2.1425458 | 45 |
| 46 | 1.9845339 | 2.0432994 | 2.1033608 | 2.1646449 | 46 |
| 47 | 2.0017186 | 2.0620213 | 2.1236732 | 2.1865965 | 47 |
| 48 | 2.0187354 | 2.0805841 | 2.1438364 | 2.2084089 | 48 |
| 49 | 2.0355924 | 2.0989960 | 2.1638580 | 2.2300895 | 49 |
| 50 | 2.0522970 | 2.1172644 | 2.1837454 | 2.2516456 | 50 |

Logarithm of Amonnt of 1 Per Annum at Componnd Interest
TABLE XIII.
$\log s_{\bar{n}}$

| $n$ | $3 \%$ | $31 / 2$ | $4 \%$ | $41 / 2$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 2.0688564 | 2.1353960 | 2.2035055 | 2.2730839 | 51 |
| 52 | 2.0852770 | 2.1533977 | 2.2231445 | 2.2944106 | 52 |
| 53 | 2.1015652 | 2.1712755 | 2.2426688 | 2.3156315 | 53 |
| 54 | 2.1177269 | 2.1890355 | 2.2620840 | 2.3367526 | 54 |
| 55 | 2.1337676 | 2.2066826 | 2.2813951 | 2.3577786 | 55 |
| 56 | 2.1496925 | 2.2242222 | 2.3006074 | 2.3787145 | 56 |
| 57 | 2.1655066 | 2.2416592 | 2.3197259 | 2.3995648 | 57 |
| 58 | 2.1812145 | 2.2589984 | 2.3387546 | 2.4203342 | 58 |
| 59 | 2.1968210 | 2.2762439 | 2.3576980 | 2.4410264 | 59 |
| 60 | 2.2123298 | 2.2933999 | 2.3765599 | 2.4616456 | 60 |
| 61 | 2.2277453 | 2.3104702 | 2.3953444 | 2.4821950 | 61 |
| 62 | 2.2430713 | 2.3274586 | 2.4140548 | 2.5026783 | 62 |
| 63 | 2.2583110 | 2.3443686 | 2.4326948 | 2.5230988 | 63 |
| 64 | 2.2734682 | 2.3612037 | 2.4512673 | 2.5434594 | 64 |
| 65 | 2.2885461 | 2.3779668 | 2.4697754 | 2.5637631 | 65 |
| 66 | 2.3035474 | 2.3946611 | 2.4882222 | 2.5840127 | 66 |
| 67 | 2.3184757 | 2.4112893 | 2.5066103 | 2.6042107 | 67 |
| 68 | 2.3333335 | 2.4278541 | 2.5249422 | 2.6243596 | 68 |
| 69 | 2.3481235 | 2.4443583 | 2.5432206 | 2.6444618 | 69 |
| 70 | 2.3628482 | 2.4608045 | 2.5614478 | 2.6645195 | 70 |
| 71 | 2.3775100 | 2.4771946 | 2.5796260 | 2.6845346 | 71 |
| 72 | 2.3921114 | 2.4935312 | 2.5977572 | 2.7045093 | 72 |
| 73 | 2.4066548 | 2.5098163 | 2.6158436 | 2.7244455 | 73 |
| 74 | 2.2411419 | 2.5260519 | 2.6338872 | 2.7443449 | 74 |
| 75 | 2.4355750 | 2.5422402 | 2.6518896 | 2.7642093 | 75 |
| 76 | 2.4499560 | 2.5583828 | 2.6698527 | 2.7840402 | 76 |
| 77 | 2.4642869 | 2.5744816 | 2.6877783 | 2.8038393 | 77 |
| 78 | 2.4785693 | 2.5905383 | 2.7056677 | 2.8236079 | 78 |
| 79 | 2.4928052 | 2.6065544 | 2.7235227 | 2.8433476 | 79 |
| 80 | 2.5069958 | 2.6225319 | 2.7413446 | 2.8630596 | 80 |
| 81 | 2.5211432 | 2.6384718 | 2.7591349 | 2.8827452 | 81 |
| 82 | 2.5352485 | 2.6543757 | 2.7768947 | 2.9024055 | 82 |
| 83 | 2.5493134 | 2.6702451 | 2.7946254 | 2.9220418 | 83 |
| 84 | 2.5633392 | 2.6860810 | 2.8123284 | 2.9416551 | 84 |
| 85 | 2.5773274 | 2.7018850 | 2.8300045 | 2.9612465 | 85 |
| 86 | 2.5912791 | 2.7176582 | 2.8476550 | 2.9808169 | 86 |
| 87 | 2.6051955 | 2.7334016 | 2.8652811 | 3.0003674 | 87 |
| 88 | 2.6190781 | 2.7491166 | 2.8828835 | 3.0198987 | 88 |
| 89 | 2.6329277 | 2.7648040 | 2.9004634 | 3.0394118 | 89 |
| 90 | 2.6467456 | 2.7804649 | 2.9180215 | 3.0589075 | 90 |
| 91 | 2.6605329 | 2.7961003 | 2.9355589 | 3.0783865 | 91 |
| 92 | 2.6742904 | 2.8117112 | 2.9530764 | 3.0978497 | 92 |
| 93 | 2.6880193 | 2.8272984 | 2.9705747 | 3.1172975 | 93 |
| 94 | 2.7017205 | 2.8428628 | 2.9880547 | 3.1367310 | 94 |
| 95 | 2.7153948 | 2.8584052 | 3.0055171 | 3.1561505 | 95 |
| 96 | 2.7290433 | 2.8739265 | 3.0229625 | 3.1755567 | 96 |
| 97 | 2.7426668 | 2.8894276 | 3.0403918 | 3.1949503 | 97 |
| 98 | 2.7562659 | 2.9049088 | 3.0578055 | 3.2143319 | 98 |
| 99 | 2.7698415 | 2.9203712 | 3.0752042 | 3.2337018 | 99 |
| 100 | 2.7833944 | 2.9358153 | 3.0925886 | 3.2530606 | 100 |

Logarithm of Amount of 1 Per Annum at Compound Interest
TABLE XIII.
$\log s_{\bar{n}}$

| $n$ | 5\% | $5 \frac{1}{2} \%$ | $6 \%$ | $7 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | . 0000000 | . 0000000 | . 0000000 | . 0000000 | 1 |
| 2 | .3117539 | . 3128118 | . 3138672 | . 3159703 | 2 |
| 3 | . 4986551 | . 5007886 | . 5029185 | . 5071675 | 3 |
| 4 | .6344898 | .6377164 | . 6409399 | . 6473774 | 4 |
| 5 | . 7423819 | . 7467191 | .7510552 | . 7597236 | 5 |
| 6 | .8326310 | . 8380963 | . 8435640 | . 8545058 | 6 |
| 7 | . 9107316 | . 9173424 | . 9239606 | . 9372180 | 7 |
| 8 | . 9799628 | . 9877365 | . 9955241 | 1.0111390 | 8 |
| 9 | 1.0424402 | 1.0513941 | 1.0603697 | 1.0783839 | 9 |
| 10 | 1.0996079 | 1.1097592 | 1.1199416 | 1.1403964 | 10 |
| 11 | 1.1524959 | 1.1638617 | 1.1752694 | 1.1982061 | 11 |
| 12 | 1.2018647 | 1.2144621 | 1.2271136 | 1.2525728 | 12 |
| 13 | 1.2482917 | 1.2621377 | 1.2760512 | 1.3040733 | 13 |
| 14 | 1.2922258 | 1.3073371 | 1.3225308 | 1.3531559 | 14 |
| 15 | 1.3340226 | 1.3504160 | 1.3669077 | 1.4001756 | 15 |
| 16 | 1.3739687 | 1.3916608 | 1.4094686 | 1.4454182 | 16 |
| 17 | 1.4122959 | 1.4313059 | 1.4504475 | 1.4891175 | 17 |
| 18 | 1.4492065 | 1.4695452 | 1.4900379 | 1.5314665 | 18 |
| 19 | 1.4848549 | 1.5065412 | 1.5284023 | 1.5726273 | 19 |
| 20 | 1.5193811 | 1.5424310 | 1.5656778 | 1.6127361 | 20 |
| 21 | 1.5529024 | 1.5773318 | 1.6019810 | 1.6519094 | 21 |
| 22 | 1.5855195 | 1.6113442 | 1.6374126 | 1.6902470 | 22 |
| 23 | 1.6173199 | 1.6445552 | 1.6720593 | 1.7278351 | 23 |
| 24 | 1.6483795 | 1.6770409 | 1.7059969 | 1.7647489 | 24 |
| 25 | 1.6787650 | 1.7088676 | 1.7392915 | 1.8010539 | 25 |
| 26 | 1.7085353 | 1.7400939 | 1.7720016 | 1.8368080 | 26 |
| 27 | 1.7377421 | 1.7707718 | 1.8041787 | 1.8720620 | 27 |
| 28 | 1.7664321 | 1.8009473 | 1.8358688 | 1.9068611 | 28 |
| 29 | 1.7946464 | 1.8306615 | 1.8671126 | 1.9412456 | 29 |
| 30 | 1.8224221 | 1.8599514 | 1.8979468 | 1.9752515 | 30 |
| 31 | 1.8497927 | 1.8888500 | 1.9284045 | 2.0089111 | 31 |
| 32 | 1.8767882 | 1.9173873 | 1.9585150 | 2.0422531 | 32 |
| 33 | 1.9034361 | 1.9455905 | 1.9883054 | 2.0753039 | 33 |
| 34 | 1.9297609 | 1.9734841 | 2.0178000 | 2.1080870 | 34 |
| 35 | 1.9557854 | 2.0010903 | 2.0470207 | 2.1406239 | 35 |
| 36 | 1.9815302 | 2.0284297 | 2.0759879 | 2.1729340 | 36 |
| 37 | 2.0070140 | 2.0555207 | 2.1047196 | 2.2050349 | 37 |
| 38 | 2.0322544 | 2.0823808 | 2.1332329 | 2.2369427 | 38 |
| 39 | 2.0572667 | 2.1090252 | 2.1615431 | 2.2686723 | 39 |
| 40 | 2.0820661 | 2.1354685 | 2.1896642 | 2.3002369 | 40 |
| 41 | 2.1066660 | 2.1617241 | 2.2176094 | 2.3316491 | 41 |
| 42 | 2.1310786 | 2.1878039 | 2.2453906 | 2.3629200 | 42 |
| 43 | 2.1553158 | 2.2137196 | 2.2730188 | 2.3940600 | 43 |
| 44 | 2.1793880 | 2.2394814 | 2.3005042 | 2.4250789 | 44 |
| 45 | 2.2033053 | 2.2650990 | 2.3278563 | 2.4559852 | 45 |
| 46 | 2.2270769 | 2.2905815 | 2.3550838 | 2.4867871 | 46 |
| 47 | 2.2507113 | 2.3159373 | 2.3821947 | 2.5174920 | 47 |
| 48 | 2.2742165 | 2.3411740 | 2.4091966 | 2.5481069 | 48 |
| 49 | 2.2976000 | 2.3662990 | 2.4360965 | 2.5786281 | 49 |
| 50 | 2.3208688 | 2.3913189 | 2.4629008 | 2.6090915 | 50 |

## Logarithm of Amount of 1 Per Annum at Compound Interest

TABLE XIII.
$\log s_{\bar{n}}$

| n | $5{ }_{0}$ | $5 \%$ | $6 \%$ | 7\% | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 2.3440293 | 2.4162399 | 2.4896155 | 2.6394725 | 51 |
| 52 | 2.3670877 | 2.4410682 | 2.5162462 | 2.6697862 | 52 |
| 53 | 2.3900497 | 2.4658092 | 2.5427983 | 2.7000373 | 53 |
| 54 | 2.4129205 | 2.4904677 | 2.5692767 | 2.7302300 | 54 |
| 55 | 2.4357052 | 2.5150488 | 2.5956858 | 2.7603686 | 55 |
| 56 | 2.4584084 | 2.5395568 | 2.6220297 | 2.7904566 | 56 |
| 57 | 2.4810349 | 2.5639961 | 2.6483128 | 2.8204973 | 57 |
| 58 | 2.5035883 | 2.5883705 | 2.6745385 | 2.8504944 | 58 |
| 59 | 2.5260729 | 2.6126838 | 2.7007103 | 2.8804504 | 59 |
| 60 | 2.5484922 | 2.6369394 | 2.7268316 | 2.9103684 | 60 |
| 61 | 2.5708497 | 2.6611405 | 2.7529053 | 2.9402508 | 61 |
| 62 | 2.5931486 | 2.6852902 | 2.7789343 | 2.9701001 | 62 |
| 63 | 2.6153922 | 2.7093915 | 2.8049213 | 2.9999185 | 63 |
| 64 | 2.6375831 | 2.7334471 | 2.8308686 | 3.0297081 | 64 |
| 65 | 2.6597242 | 2.7574593 | 2.8567789 | 3.0594707 | 65 |
| 66 | 2.6818180 | 2.7814307 | 2.8826541 | 3.0892082 | 66 |
| 67 | 2.7038670 | 2.8053636 | 2.9084965 | 3.1189224 | 67 |
| 68 | 2.7258735 | 2.8292600 | 2.9343079 | 3.1486148 | 68 |
| 69 | 2.7478396 | 2.8531220 | 2.9600901 | 3.1782866 | 69 |
| 70 | 2.7697674 | 2.8769513 | 2.9858449 | 3.2079396 | 70 |
| 71 | 2.7916590 | 2.9007499 | 3.0115737 | 3.2375748 | 71 |
| 72 | 2.8135160 | 2.9245194 | 3.0372785 | 3.2671934 | 72 |
| 73 | 2.8353403 | 2.9482614 | 3.0629602 | 3.2967965 | 73 |
| 74 | 2.8571335 | 2.9719773 | 3.0886203 | 3.3263851 | 74 |
| 75 | 2.8788971 | 2.9956687 | 3.1142602 | 3.3559603 | 75 |
| 76 | 2.9006328 | 3.0193367 | 3.1398809 | 3.3855229 | 76 |
| 77 | 2.9223416 | 3.0429828 | 3.1654835 | 3.4150736 | 77 |
| 78 | 2.9440253 | 3.0666079 | 3.1910692 | 3.4446135 | 78 |
| 79 | 2.9656848 | 3.0902134 | 3.2166389 | 3.4741431 | 79 |
| 80 | 2.9873215 | 3.1138001 | 3.2421935 | 3.5036630 | 80 |
| 81 | 3.0089366 | 3.1373693 | 3.2677338 | 3.5331741 | 81 |
| 82 | 3.0305308 | 3.1609216 | 3.2932608 | 3.5626767 | 82 |
| 83 | 3.0521055 | 3.1844582 | 3.3187751 | 3.5921716 | 83 |
| 84 | 3.0736614 | 3.2079797 | 3.3442776 | 3.6216592 | 84 |
| 85 | 3.0951997 | 3.2314872 | 3.3697689 | 3.6511400 | 85 |
| 86 | 3.1167210 | 3.2549811 | 3.3952496 | 3.6806144 | 86 |
| 87 | 3.1382264 | 3.2784624 | 3.4207204 | 3.7100828 | 87 |
| 88 | 3.1597164 | 3.3019316 | 3.4461817 | 3.7395457 | 88 |
| 89 | 3.1811920 | 3.3253894 | 3.4716342 | 3.7690034 | 89 |
| 90 | 3.2026538 | 3.3488364 | 3.4970784 | 3.7984563 | 90 |
| 91 | 3.2241024 | 3.3722731 | 3.5225146 | 3.8279046 | 91 |
| 92 | 3.2455384 | 3.3957003 | 3.5479435 | 3.8573487 | 92 |
| 93 | 3.2669627 | 3.4191183 | 3.5733653 | 3.8867889 | 93 |
| 94 | 3.2883756 | 3.4425275 | 3.5987807 | 3.9162253 | 94 |
| 95 | 3.3097778 | 3.4659285 | 3.6241896 | 3.9456583 | 95 |
| 96 | 3.3311697 | 3.4893218 | 3.6495929 | 3.9750881 | 96 |
| 97 | 3.3525519 | 3.5127076 | 3.6749906 | 4.0045148 | 97 |
| 98 | 3.3739249 | 3.5360865 | 3.7003830 | 4.0339388 | 98 |
| 99 | 3.3952889 | 3.5594587 | 3.7257705 | 4.0633601 | 99 |
| 100 | 3.4166447 | 3.5828247 | 3.7511534 | 4.9027789 | 100 |

Logarithm of Present Value of 1 per Annum at Compound Interest TABLE XIV.
$\log a_{m}$

| n | $1 \%$ | 1140 | 1\%\% | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 9.9956786 | 9.9946049 | 9.9935339 | 9.9924656 | 1 |
| 2 | 0.2945533 | 0.2929457 | 0.2913429 | 0.2897447 | 2 |
| 3 | 0.4684928 | 0.4663535 | 0.4642213 | 0.4620960 | 3 |
| 4 | 0.5912834 | 0.5886142 | 0.5859551 | 0.5833056 | 4 |
| 5 | 0.6860488 | 0.6828519 | 0.6796682 | 0.6764975 | 5 |
| 6 | 0.7630891 | 0.7593663 | 0.7556605 | 0.7519714 | 6 |
| 7 | 0.8278985 | 0.8236519 | 0.8194264 | 0.8152218 | 7 |
| 8 | 0.8837567 | 0.8789882 | 0.8742455 | 0.8695282 | 8 |
| 9 | 0.9327790 | 0.9274906 | 0.9222332 | 0.9170060 | 9 |
| 10 | 0.9764098 | 0.9706037 | 0.9648338 | 0.9590998 | 10 |
| 11 | 1.0156795 | 1.0093574 | 1.0030777 | 0.9968395 | 11 |
| 12 | 1.0513485 | 1.0445127 | 1.0377254 | 1.0309861 | 12 |
| 13 | 1.0839946 | 1.0766473 | 1.0693547 | 1.0621170 | 13 |
| 14 | 1.1140669 | 1.1062096 | 1.0984146 | 1.0906814 | 14 |
| 15 | 1.1419215 | 1.1335564 | 1.1252611 | 1.1170352 | 15 |
| 16 | 1.1678449 | 1.1589740 | 1.1501810 | 1.1414654 | 16 |
| 17 | 1.1920723 | 1.1826976 | 1.1734092 | 1.1642065 | 17 |
| 18 | 1.2147980 | 1.2049213 | 1.1951399 | 1.1854533 | 18 |
| 19 | 1.2361846 | 1.2258081 | 1.2155363 | 1.2053683 | 19 |
| 20 | 1.2563701 | 1.2454959 | 1.2347359 | 1.2240895 | 20 |
| 21 | 1.2754721 | 1.2641018 | 1.2528563 | 1.2417345 | 21 |
| 22 | 1.2935919 | 1.2817277 | 1.2699989 | 1.2584043 | 22 |
| 23 | 1.3108168 | 1.2984609 | 1.2862512 | 1.2741866 | 23 |
| 24 | 1.3272237 | 1.3143777 | 1.3016897 | 1.2891582 | 24 |
| 25 | 1.3428796 | 1.3295457 | 1.3163816 | 1.3033859 | 25 |
| 26 | 1.3578434 | 1.3440236 | 1.3303860 | 1.3169288 | 26 |
| 27 | 1.3721681 | 1.3578643 | 1.3437555 | 1.3298396 | 27 |
| 28 | 1.3858999 | 1.3711144 | 1.3565367 | 1.3421651 | 28 |
| 29 | 1.3990814 | 1.3838157 | 1.3687716 | 1.3539471 | 29 |
| 30 | 1.4117494 | 1.3960056 | 1.3804978 | 1.3652230 | 30 |
| 31 | 1.4239383 | 1.4077186 | 1.3917490 | 1.3760269 | 31 |
| 32 | 1.4356785 | 1.4189848 | 1.4025561 | 1.3863894 | 32 |
| 33 | 1.4469981 | 1.4298323 | 1.4129467 | 1.3963384 | 33 |
| 34 | 1.4579223 | 1.4402864 | 1.4229464 | 1.4058990 | 34 |
| 35 | 1.4684740 | 1.4503701 | 1.4325780 | 1.4150945 | 35 |
| 36 | 1.4786748 | 1.4601047 | 1.4418629 | 1.4239459 | 36 |
| 37 | 1.4885437 | 1.4695094 | 1.4508205 | 1.4324729 | 37 |
| 38 | 1.4980990 | 1.4786026 | 1.4594687 | 1.4406932 | 38 |
| 39 | 1.5073570 | 1.4874002 | 1.4678238 | 1.4486233 | 39 |
| 40 | 1.5163329 | 1.4959178 | 1.4759013 | 1.4562784 | 40 |
| 41 | 1.5250407 | 1.5041695 | 1.4837150 | 1.4636726 | 41 |
| 42 | 1.5334937 | 1.5121681 | 1.4912783 | 1.4708190 | 42 |
| 43 | 1.5417041 | 1.5199260 | 1.4986032 | 1.4777297 | 43 |
| 44 | 1.5496830 | 1.5274545 | 1.5057010 | 1.4844162 | 44 |
| 45 | 1.5574411 | 1.5347641 | 1.5125822 | 1.4908888 | 45 |
| 46 | 1.5649883 | 1.5418647 | 1.5192567 | 1.4971574 | 46 |
| 47 | 1.5723336 | 1.5487654 | 1.5257339 | 1.5032313 | 47 |
| 48 | 1.5794858 | 1.5554751 | 1.5320221 | 1.5091191 | 48 |
| 49 | 1.5864531 | 1.5620017 | 1.5381297 | 1.5148290 | 49 |
| 50 | 1.5932430 | 1.5683528 | 1.5440641 | 1.5203684 | 50 |

TABLE XIV.
$\log a_{\bar{n}}$

| $n$ | $1 \%$ | $11 / 4$. | $1_{2}{ }_{0}$ | $13 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.5998627 | 1.5745356 | 1.5498326 | 1.5257444 | 51 |
| 52 | 1.6063189 | 1.5805570 | 1.5554419 | 1.5309641 | 52 |
| 53 | 1.6126180 | 1.5864232 | 1.5608985 | 1.5360335 | 53 |
| 54 | 1.6187660 | 1.5921401 | 1.5662080 | 1.5409588 | 54 |
| 55 | 1.6247686 | 1.5977137 | 1.5713764 | 1.5457455 | 55 |
| 56 | 1.6306310 | 1.6031490 | 1.5764091 | 1.5503989 | 56 |
| 57 | 1.6363587 | 1.6084513 | 1.5813109 | 1.5549244 | 57 |
| 58 | 1.6419560 | 1.6136253 | 1.5860868 | 1.5593266 | 58 |
| 59 | 1.6474278 | 1.6186757 | 1.5907411 | 1.5636099 | 59 |
| 60 | 1.6527783 | 1.6236068 | 1.5952786 | 1.5677788 | 60 |
| 61 | 1.6580117 | 1.6284226 | 1.5997031 | 1.5718373 | 61 |
| 62 | 1.6631319 | 1.6331271 | 1.6040185 | 1.5757895 | 62 |
| 63 | 1.6681426 | 1.6377241 | 1.6082287 | 1.5796389 | 63 |
| 64 | 1.6730473 | 1.6422170 | 1.6123371 | 1.5833893 | 64 |
| 65 | 1.6778496 | 1.6466094 | 1.6163472 | 1.5870438 | 65 |
| 66 | 1.6825526 | 1.6509042 | 1.6202620 | 1.5906058 | 66 |
| 67 | 1.6871593 | 1.6551048 | 1.6240849 | 1.5940782 | 67 |
| 68 | 1.6916728 | 1.6592141 | 1.6278186 | 1.5974640 | 68 |
| 69 | 1.6960959 | 1.6632348 | 1.6314660 | 1.6007662 | 69 |
| 70 | 1.7004311 | 1.6671697 | 1.6350298 | 1.6039872 | 70 |
| 71 | 1.7046814 | 1.6710212 | 1.6385126 | 1.6071297 | 71 |
| 72 | 1.7088489 | 1.6747920 | 1.6419168 | 1.6101963 | 72 |
| 73 | 1.7129362 | 1.6784844 | 1.6452448 | 1.6131891 | 73 |
| 74 | 1.7169454 | 1.6821006 | 1.6484987 | 1.6161105 | 74 |
| 75 | 1.7208788 | 1.6856429 | 1.6516811 | 1.6189626 | 75 |
| 76 | 1.7247385 | 1.6891134 | 1.6547937 | 1.6217474 | 76 |
| 77 | 1.7285263 | 1.6925139 | 1.6578387 | 1.6244671 | 77 |
| 78 | 1.7322446 | 1.6958466 | 1.6608179 | 1.6271236 | 78 |
| 79 | 1.7358949 | 1.6991132 | 1.6637332 | 1.6297186 | 79 |
| 80 | 1.7394790 | 1.7023155 | 1.6665865 | 1.6322540 | 80 |
| 81 | 1.7429988 | 1.7054553 | 1.6693793 | 1.6347315 | 81 |
| 82 | 1.7464558 | 1.7085342 | 1.6721135 | 1.6371527 | 82 |
| 83 | 1.7498517 | 1.7115538 | 1.6747905 | 1.6395190 | 83 |
| 84 | 1.7531880 | 1.7145157 | 1.6774119 | 1.6418322 | 84 |
| 85 | 1.7564662 | 1.7174213 | 1.6799792 | 1.6440938 | 85 |
| 86 | 1.7596878 | 1.7202721 | 1.6824938 | 1.6463050 | 86 |
| 87 | 1.7628541 | 1.7230694 | 1.6849571 | 1.6484673 | 87 |
| 88 | 1.7659665 | 1.7258147 | 1.6873704 | 1.6505818 | 88 |
| 89 | 1.7690262 | 1.7285091 | 1.6897350 | 1.6526500 | 89 |
| 90 | 1.7720346 | 1.7311538 | 1.6920520 | 1.6546732 | 90 |
| 91 | 1.7749927 | 1.7337504 | 1.6943229 | 1.6566524 | 91 |
| 92 | 1.7779019 | 1.7362997 | 1.6965486 | 1.6585888 | 92 |
| 93 | 1.7807632 | 1.7388028 | 1.6987304 | 1.6604835 | 93 |
| 94 | 1.7835778 | 1.7412610 | 1.7008692 | 1.6623376 | 94 |
| 95 | 1.7863465 | 1.7436754 | 1.7029662 | 1.6641522 | 95 |
| 96 | 1.7890707 | 1.7460467 | 1.7050223 | 1.6659281 | 96 |
| 97 | 1.7917511 | 1.7483762 | 1.7070385 | 1.6676665 | 97 |
| 98 | 1.7943887 | 1.7506646 | 1.7090159 | 1.6693684 | 98 |
| 99 | 1.7969846 | 1.7529131 | 1.7109552 | 1.6710343 | 99 |
| 100 | 1.7995395 | 1.7551224 | 1.7128575 | 1.6726655 | 100 |

Logarithm of Present Value of 1 per Annum at Compound Interest
TABLE XIV.
$\log a_{\bar{n}}$

| $n$ | $2 \%$ | $2 \%$ | 212\% | $23 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 9.9913999 | 9.9903366 | 9.9892761 | 9.9882182 | 1 |
| 2 | 0.2881510 | 0.2865619 | 0.2849773 | 0.2833972 | 2 |
| 3 | 0.4599777 | 0.4578663 | 0.4557618 | 0.4536641 | 3 |
| 4 | 0.5806660 | 0.5780361 | 0.5754158 | 0.5728051 | 4 |
| 5 | 0.6733398 | 0.6701951 | 0.6670632 | 0.6639441 | 5 |
| 6 | 0.7482990 | 0.7446432 | 0.7410038 | 0.7373808 | 6 |
| 7 | 0.8110379 | 0.8068747 | 0.8027321 | 0.7986098 | 7 |
| 8 | 0.8648362 | 0.8601693 | 0.8555275 | 0.8509104 | 8 |
| 9 | 0.9118092 | 0.9066424 | 0.9015055 | 0.8963982 | 9 |
| 10 | 0.9534014 | 0.9477383 | 0.9421105 | 0.9365176 | 10 |
| 11 | 0.9906429 | 0.9844873 | 0.9783727 | 0.9722987 | 11 |
| 12 | 1.0242944 | 1.0176501 | 1.0110528 | 1.0045021 | 12 |
| 13 | 1.0549336 | 1.0478042 | 1.0407283 | 1.0337056 | 13 |
| 14 | 1.0830096 | 1.0753988 | 1.0678484 | 1.0603581 | 14 |
| 15 | 1.1088782 | 1.1007897 | 1.0927690 | 1.0848157 | 15 |
| 16 | 1.1328265 | 1.1242639 | 1.1157770 | 1.1073651 | 16 |
| 17 | 1.1550891 | 1.1460562 | 1.1371071 | 1.1282413 | 17 |
| 18 | 1.1758605 | 1.1663609 | 1.1569537 | 1.1476382 | 18 |
| 19 | 1.1953035 | 1.1853409 | 1.1754796 | 1.1657190 | 19 |
| 20 | 1.2135558 | 1.2031339 | 1.1928228 | 1.1826215 | 20 |
| 21 | 1.2307352 | 1.2198576 | 1.2091006 | 1.1984631 | 21 |
| 22 | 1.2469427 | 1.2356131 | 1.2244143 | 1.2133451 | 22 |
| 23 | 1.2622660 | 1.2504881 | 1.2388515 | 1.2273549 | 23 |
| 24 | 1.2767817 | 1.2645589 | 1.2524886 | 1.2405691 | 24 |
| 25 | 1.2905567 | 1.2778929 | 1.2653928 | 1.2530548 | 25 |
| 26 | 1.3036504 | 1.2905491 | 1.2776232 | 1.2648710 | 26 |
| 27 | 1.3161151 | 1.3025799 | 1.2892323 | 1.2760704 | 27 |
| 28 | 1.3279975 | 1.3140322 | 1.3002669 | 1.2866995 | 28 |
| 29 | 1.3393398 | 1.3249478 | 1.3107687 | 1.2968002 | 29 |
| 30 | 1.3501793 | 1.3353642 | 1.3207753 | 1.3064100 | 30 |
| 31 | 1.3605499 | 1.3453153 | 1.3303206 | 1.3155628 | 31 |
| 32 | 1.3704823 | 1.3548319 | 1.3394351 | 1.3242892 | 32 |
| 33 | 1.3800042 | 1.3639414 | 1.3481467 | 1.3326168 | 33 |
| 34 | 1.3891411 | 1.3726695 | 1.3564807 | 1.3405712 | 34 |
| 35 | 1.3979160 | 1.3810391 | 1.3644601 | 1.3481751 | 35 |
| 36 | 1.4063501 | 1.3890716 | 1.3721061 | 1.3554499 | 36 |
| 37 | 1.4144628 | 1.3967860 | 1.3794382 | 1.3624149 | 37 |
| 38 | 1.4222720 | 1.4042005 | 1.3864740 | 1.3690879 | 38 |
| 39 | 1.4297941 | 1.4113313 | 1.3932302 | 1.3754853 | 39 |
| 40 | 1.4370443 | 1.4181939 | 1.3997217 | 1.3816222 | 40 |
| 41 | 1.4440368 | 1.4248022 | 1.4059628 | 1.3875128 | 41 |
| 42 | 1.4507846 | 1.4311692 | 1.4119665 | 1.3931700 | 42 |
| 43 | 1.4572998 | 1.4373070 | 1.4177447 | 1.3986060 | 43 |
| 44 | 1.4635938 | 1.4432271 | 1.4233089 | 1.4038319 | 44 |
| 45 | 1.4696772 | 1.4489399 | 1.4286696 | 1.4088583 | 45 |
| 46 | 1.4755596 | 1.4544553 | 1.4338365 | 1.4136948 | 46 |
| 47 | 1.4812503 | 1.4597823 | 1.4388188 | 1.4183509 | 47 |
| 48 | 1.4867580 | 1.4649297 | 1.4436252 | 1.4228349 | 48 |
| 49 | 1.4920907 | 1.4699054 | 1.4482636 | 1.4271548 | 49 |
| 50 | 1.4972560 | 1.4747172 | 1.4527417 | 1.4313182 | 50 |

Logarithm of Present Value of 1 per Annum at Compound Interest
TABLE XIV. $\log \alpha_{\bar{n}}$

| $n$ | $2 \%$ | 21/4\% | 2\% \% | 23.40 | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.5022611 | 1.4793721 | 1.4570664 | 1.4353322 | 51 |
| 52 | 1.5071127 | 1.4838769 | 1.4612445 | 1.4392036 | 52 |
| 53 | 1.5118171 | 1.4882377 | 1.4652824 | 1.4429384 | 53 |
| 54 | 1.5163803 | 1.4924606 | 1.4691860 | 1.4465428 | 54 |
| 55 | 1.5208081 | 1.4965512 | 1.472 9608 | 1.4500221 | 55 |
| 56 | 1.5251056 | 1.5005150 | 1.4766122 | 1.4533817 | 56 |
| 57 | 1.5292779 | 1.5043567 | 1.4801452 | 1.4566268 | 57 |
| 58 | 1.5333300 | 1.5080814 | 1.4835646 | 1.4597619 | 58 |
| 59 | 1.5372661 | 1.5116935 | 1.4868747 | 1.4627915 | 59 |
| 60 | 1.5410909 | 1.5151973 | 1.4900802 | 1.4657197 | 60 |
| 61 | 1.5448081 | 1.5185970 | 1.4931847 | 1.4685508 | 61 |
| 62 | 1.5484218 | 1.5218962 | 1.4961922 | 1.4712886 | 62 |
| 63 | 1.5519357 | 1.5250987 | 1.4991064 | 1.4739366 | 63 |
| 64 | 1.5553534 | 1.5282081 | 1.5019309 | 1.4764983 | 64 |
| 65 | 1.5586782 | 1.5312277 | 1.5046689 | 1.4789770 | 65 |
| 66 | 1.5619132 | 1.5341608 | 1.5073235 | 1.4813758 | 66 |
| 67 | 1.5650615 | 1.5370101 | 1.5098980 | 1.4836979 | 67 |
| 68 | 1.5681261 | 1.5397789 | 1.5123950 | 1.4859458 | 68 |
| 69 | 1.5711098 | 1.5424697 | 1.5148172 | 1.4881226 | 69 |
| 70 | 1.5740152 | 1.5450852 | 1.5171676 | 1.4902306 | 70 |
| 71 | 1.5768449 | 1.5476282 | 1.5194483 | 1.4922725 | 71 |
| 72 | 1.5796013 | 1.5501009 | 1.5216620 | 1.4942504 | 72 |
| 73 | 1.5822869 | 1.5525056 | 1.5238108 | 1.4961670 | 73 |
| 74 | 1.5849037 | 1.5548445 | 1.5258971 | 1.4980240 | 74 |
| 75 | 1.5874540 | 1.5571200 | 1.5279228 | 1.4998239 | 75 |
| 76 | 1.5899399 | 1.5593338 | 1.5298900 | 1.5015683 | 76 |
| 77 | 1.5922632 | 1.5614879 | 1.5318008 | 1.5032595 | 77 |
| 78 | 1.5947260 | 1.5635846 | 1.5336569 | 1.5048989 | 78 |
| 79 | 1.5970301 | 1.5656252 | 1.5354600 | 1.5064888 | 79 |
| 80 | 1.5992771 | 1.5676118 | 1.5372121 | 1.5080303 | 80 |
| 81 | 1.6014689 | 1.5695459 | 1.5389146 | 1.5095255. | 81 |
| 82 | 1.6036071 | 1.5714291 | 1.5405692 | 1.5109757 | 82 |
| 83 | 1.6056931 | 1.5732630 | 1.5421774 | 1.5123824 | 83 |
| 84 | 1.6077285 | 1.5750492 | 1.5437405 | 1.5137471 | 84 |
| 85 | 1.6097148 | 1.5767890 | 1.5452602 | 1.5150712 | 85 |
| 86 | 1.6116534 | 1.5784837 | 1.5467377 | 1.5163560 | 86 |
| 87 | 1.6135456 | 1.5801347 | 1.5481744 | 1.5176027 | 87 |
| 88 | 1.6153928 | 1.5817434 | 1.5495715 | 1.5188128 | 88 |
| 89 | 1.6171961 | 1.5833110 | 1.5509301 | 1.5199871 | 89 |
| 90 | 1.6189568 | 1.5848386 | 1.5522515 | 1.5211269 | 90 |
| 91 | 1.6206761 | 1.5863275 | 1.5535369 | 1.5222335 | 91 |
| 92 | 1.6223551 | 1.3877785 | 1.5547873 | 1.5233077 | 92 |
| 93 | 1.6239950 | 1.5891931 | 1.5560037 | 1.5243507 | 93 |
| 94 | 1.6255965 | 1.5905720 | 1.5571871 | 1.5253632 | 94 |
| 95 | 1.6271612 | 1.5919164 | 1.5583385 | 1.5263465 | 95 |
| 96 | 1.6286895 | 1.5932272 | 1.5594590 | - 1.5273012 | 96 |
| 97 | 1.6301828 | 1.5945053 | 1.5605493 | 1.5282284 | 97 |
| 98 | 1.6316419 | 1.5957517 | 1.5616104 | 1.5291290 | 98 |
| 99 | 1.6330675 | 1.5969672 | 1.5626433 | 1.5300036 | 99 |
| 100 | 1.6344606 | 1.5981527 | 1.5636484 | 1.5308531 | 100 |

## Logarithm of Present Value of 1 per Annum at Compound Interest

TABLE NIV. $\quad \log a_{\bar{m}}$

| n | $3 \%$ | $3{ }_{2} \%$ | $4 \%$ | $1 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 9.9871628 | 9.9850596 | 9.9829667 | 9.9808837 | 1 |
| 2 | 0.2818216 | 0.2786837 | 0.2755635 | 0.2724607 | 2 |
| 3 | 0.4515733 | 0.4474118 | 0.4432772 | 0.4391691 | 3 |
| 4 | 0.5702040 | 0.5650303 | 0.5598941 | 0.5547950 | 4 |
| 5 | 0.6608377 | 0.6546628 | 0.6485378 | 0.6424622 | 5 |
| 6 | 0.7337742 | 0.7266093 | 0.7195084 | 0.7124706 | 6 |
| 7 | 0.7945078 | 0.7863640 | 0.7782999 | 0.7703144 | 7 |
| 8 | 0.8463181 | 0.8372067 | 0.8281922 | 0.8192732 | 8 |
| 9 | 0.8913205 | 0.8812526 | 0.8713003 | 0.8614621 | 9 |
| 10 | 0.9309593 | 0.9199461 | 0.9090688 | 0.8983257 | 10 |
| 11 | 0.9662649 | 0.9543173 | 0.9425277 | 0.9308939 | 11 |
| 12 | 0.9979978 | 1.9851270 | 0.9724377 | 0.9599273 | 12 |
| 13 | 1.0267357 | 1.0129527 | 0.9993763 | 0.9860033 | 13 |
| 14 | 1.0529275 | 1.3082433 | 1.0237924 | 1.0095710 | 14 |
| 15 | 1.0769292 | 1.0613549 | 1.0460418 | 1.0309859 | 15 |
| 16 | 1.0990277 | 1.0825742 | 1.0664115 | 1.0505350 | 16 |
| 17 | 1.1194578 | 1.1021359 | 1.0851360 | 1.0684527 | 17 |
| 18 | 1.1384136 | 1.1202343 | 1.1024096 | 1.0849332 | 18 |
| 19 | 1.1560582 | 1.1370323 | 1.1183950 | 1.1001393 | 19 |
| 20 | 1.1725293 | 1.1526675 | 1.1332299 | 1.1142084 | 20 |
| 21 | 1.1879442 | 1.1672574 | 1.1470317 | 1.1272579 | 21 |
| 22 | 1.2024043 | 1.1809033 | 1.1599014 | 1.1393887 | 22 |
| 23 | 1.2159972 | 1.1936924 | 1.1719265 | 1.1506882 | 23 |
| 24 | 1.2287991 | 1.2057014 | 1.1831833 | 1.1612325 | 24 |
| 25 | 1.2408773 | 1.2169971 | 1.1937388 | 1.1710887 | 25 |
| 26 | 1.2522908 | 1.2276387 | 1.2036520 | 1.1803155 | 26 |
| 27 | 1.2630921 | 1.2376786 | 1.2129752 | 1.1889651 | 27 |
| 28 | 1.2733279 | 1.2471633 | 1.2217548 | 1.1970840 | 28 |
| 29 | 1.2830400 | 1.2561346 | 1.2300327 | 1.2047137 | 29 |
| 30 | 1.2922658 | 1.2646301 | 1.2378460 | 1.2118914 | 30 |
| 31 | 1.3010393 | 1.2726833 | 1.2452287 | 1.2186508 | 31 |
| 32 | 1.3093909 | 1.2803248 | 1.2522109 | 1.2250220 | 32 |
| 33 | 1.3173485 | 1.2875825 | 1.2588203 | 1.2310326 | 33 |
| 34 | 1.3249373 | 1.2944813 | 1.2650821 | 1.2367075 | 34 |
| 35 | 1.3321802 | 1.3010443 | 1.2710190 | 1.2420694 | 35 |
| 36 | 1.3390985 | 1.3072926 | 1.2766521 | 1.2471392 | 36 |
| 37 | 1.3457115 | 1.3132454 | 1.2820004 | 1.2519359 | 37 |
| 38 | 1.3520370 | 1.3189204 | 1.2870818 | 1.2564770 | 38 |
| 39 | 1.3580913 | 1.3243339 | 1.2919122 | 1.2607785 | 39 |
| 40 | 1.3638896 | 1.3295011 | 1.2965067 | 1.2648552 | 40 |
| 41 | 1.3694459 | 1.3344357 | 1.3008791 | 1.2687209 | 41 |
| 42 | 1.3747733 | 1.3391509 | 1.3050423 | 1.2723882 | 42 |
| 43 | 1.3798836 | 1.3436585 | 1.3090079 | 1.2758688 | 43 |
| 44 | 1.3847883 | 1.3479696 | 1.3127873 | 1.2791736 | 44 |
| 45 | 1.3894977 | 1.3520947 | 1.3163906 | 1.2823127 | 45 |
| 46 | 1.3940216 | 1.3560434 | 1.3198273 | 1.2852955 | 46 |
| 47 | 1.3983690 | 1.3598248 | 1.3231064 | 1.2881309 | 47 |
| 48 | 1.4025487 | 1.3634473 | 1.3262361 | 1.2908269 | 48 |
| 49 | 1.4065684 | 1.3669190 | 1.3292244 | 1.2933913 | 49 |
| 50 | 1.4104358 | 1.3702469 | 1.3320784 | 1.2958311 | 50 |

Logarithm of Present Value of 1 per Annum at Compound Interest
TABLE XIV. $\log a_{\bar{n}}$

| " | $3 \%$ | $3{ }_{2}^{1} \%_{0}$ | $4 \%$ | $4^{1}{ }_{2}{ }^{\prime}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.4141579 | 1.3734383 | 1.3348052 | 1.2981531 | 51 |
| 52 | 1.4177413 | 1.3764996 | 1.3374109 | 1.3003634 | 52 |
| 53 | 1.4211923 | 1.3794371 | 1.3399018 | 1.3024681 | 53 |
| 54 | 1.4245167 | 1.3822566 | 1.3422837 | 1.3044728 | 54 |
| 55 | 1.4277202 | 1.3849634 | 1.3445614 | 1.3063825 | 55 |
| 56 | 1.4308078 | 1.3875626 | 1.3467405 | 1.3082021 | 56 |
| 57 | 1.4337848 | 1.3900594 | 1.3488255 | 1.3099363 | 57 |
| 58 | 1.4366556 | 1.3924580 | 1.3508209 | 1.3115893 | 58 |
| 59 | 1.4394247 | 1.3947633 | 1.3527309 | 1.3131652 | 59 |
| 60 | 1.4420963 | 1.3969788 | 1.3545596 | 1.3146681 | 60 |
| 61 | 1.4446746 | 1.3991089 | 1.3563107 | 1.3161012 | 61 |
| 62 | 1.4471633 | 1.4011569 | 1.3579877 | 1.3174682 | 62 |
| 63 | 1.4495658 | 1.4031266 | 1.3595943 | 1.3187724 | 63 |
| 64 | 1.4518858 | 1.4050212 | 1.3611335 | 1.3200168 | 64 |
| 65 | 1.4541264 | 1.4068440 | 1.3626083 | 1.3212043 | 65 |
| 66 | 1.4562907 | 1.4085979 | 1.3640218 | 1.3223376 | 66 |
| 67 | 1.4583817 | 1.4102858 | 1.3653766 | 1.3234193 | 67 |
| 68 | 1.4604023 | 1.4119103 | 1.3666752 | 1.3244520 | 68 |
| 69 | 1.4623549 | 1.4134742 | 1.3679203 | 1.3254379 | 69 |
| 70 | 1.4642424 | 1.4149800 | 1.3691139 | 1.3263791 | 70 |
| 71 | 1.4660670 | 1.4164297 | 1.3702588 | 1.3272780 | 71 |
| 72 | 1.4678313 | 1.4178259 | 1.3713568 | 1.3281365 | 72 |
| 73 | 1.4695373 | 1.4191708 | 1.3724099 | 1.3289562 | 73 |
| 74 | 1.4711873 | 1.4204660 | 1.3734200 | 1.3297395 | 74 |
| 75 | 1.4727832 | 1.4217139 | 1.3743892 | 1.3304874 | 75 |
| 76 | 1.4743270 | 1.4229161 | 1.3753189 | 1.3312020 | 76 |
| 77 | 1.4758206 | 1.4240746 | 1.3762111 | 1.3318850 | 77 |
| 78 | 1.4772658 | 1.4251910 | 1.3770673 | 1.3325373 | 78 |
| 79 | 1.4786644 | 1.4262668 | 1.3778889 | 1.3331607 | 79 |
| 80 | 1.4800178 | 1.4273040 | 1.3786774 | 1.3337563 | 80 |
| 81 | 1.4813279 | 1.4283034 | 1.3794344 | 1.3343256 | 81 |
| 82 | 1.4825962 | 1.4292670 | 1.3801609 | 1.3348697 | 82 |
| 83 | 1.4838238 | 1.4301960 | 1.3808583 | 1.3353897 | 83 |
| 84 | 1.4850124 | 1.4310916 | 1.3815278 | 1.3358868 | 84 |
| 85 | 1.4861633 | 1.4319552 | 1.3821707 | 1.3363619 | 85 |
| 86 | 1.4872778 | 1.4327881 | 1.3827879 | 1.3368160 | 86 |
| 87 | 1.488.3571 | 1.4335912 | 1.3833806 | 1.3372501 | 87 |
| 88 | 1.4894022 | 1.4343657 | 1.3839497 | 1.3376652 | 88 |
| 89 | 1.4904147 | 1.4351128 | 1.3844962 | 1.3380620 | 89 |
| 90 | 1.4913954 | 1.4358335 | 1.3850211 | 1.3384413 | 90 |
| 91 | 1.4923454 | 1.4365285 | 1.3855251 | 1.3388041 | 91 |
| 92 | 1.4932657 | 1.4371991 | 1.3860092 | 1.3391510 | 92 |
| 93 | 1.4941575 | 1.4378460 | 1.3864741 | 1.3394824 | 93 |
| 94 | 1.4950215 | 1.4384700 | 1.3869209 | 1.3397997 | 94 |
| 95 | 1.4958586 | 1.4390720 | 1.3873499 | 1.3401029 | 95 |
| 96 | 1.4966698 | 1.4396529 | 1.3877619 | 1.3403929 | 96 |
| 97 | 1.4974560 | 1.4402136 | 1.3881578 | 1.3406702 | 97 |
| 98 | 1.4982178 | 1.4407545 | 1.3885382 | 1.3409354 | 98 |
| 99 | 1.4989563 | 1.4412766 | 1.3889036 | 1.3411890 | 99 |
| 100 | 1.4996720 | 1.4417804 | 1.3892547 | 1.3414316 | 100 |

TUBLE オル. $\log a_{n}$

| $n$ | 5 | 52, | $6{ }^{\prime \prime}$, | $8 \%$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 9.9788108 | 9.9757475 | 9.9746942 | 9.9705152 | 1 |
| 2 | 0.269 3752 | 0.2653070 | 0.2632555 | 0.2572028 | 2 |
| 3 | 0.4350872 | 0.4310392 | 0.4270009 | 0.4190951 | 3 |
| 4 | 0.5497327 | 0.5447056 | 0.5397165 | 0.5298423 | 4 |
| 5 | 0.5354354 | 0.530 4563 | 0.5245259 | 0.5128047 | 5 |
| 5 | 0.7054952 | 0.5985815 | 0.6917288 | 0.6782032 | 5 |
| 7 | $0.752 \triangle 055$ | 0.7545752 | 0.7458195 | 0.7315315 | 7 |
| 8 | 0.810 4485 | 0.3017959 | 0.7930772 | 0.7760688 | 8 |
| 9 | 0.3517355 | 0.8421220 | 0.8326170 | 0.8139299 | 9 |
| 10 | O8877949 | 0.8772346 | 0.8558829 | 0.8455587 | 10 |
| 19 | 0.9194135 | 0.9080847 | 0.8959049 | 0.8749845 | 11 |
| 12 | 09475930 | 09354325 | 0.9234432 | 0.8993574 | 12 |
| 13 | 0.9728303 | 0.9598557 | 0.9470749 | 0.9220842 | 13 |
| 14 | 09955755 | 0.9818027 | 0.9582485 | 0.9497830 | 14 |
| 15 | 1.0151839 | 1.0095291 | 0.9873998 | 0.9594990 | 15 |
| 15 | 10349399 | 1.0195214 | 1.0045748 | 0.9752777 | 15 |
| 17 | 1.0520806 | 1.0360142 | 1.0202477 | 0.9895932 | 17 |
| 13 | 1 0577992 | 1.0590010 | 1.0345323 | 1.0025585 | 18 |
| 19 | 1.0822582 | 9.064 7445 | 1.0475910 | 1.0143355 | 19 |
| 20 | 10955950 | 1.0773818 | 1.0595604 | 1.0250606 | 20 |
| 29 | 1.1079279 | 1.0890309 | 1.0705578 | 1.0348500 | 21 |
| 22 | 1.1193550 | 1.0997901 | 1.0805836 | 1.0438039 | 22 |
| 23 | 1.1299569 | 1.1097486 | 1.0900244 | 1.0520082 | 23 |
| 24 | , 1 1393353 | 1.1189819 | 1.098 6569 | 1.0595382 | 24 |
| 25 | 1.1490325 | 1.1275561 | 1.9056449 | 1.0554594 | 25 |
| 26 | 1.9575935 | 9.1355300 | 1.1140492 | 1.0722298 | 25 |
| 27 | 1.1556311 | 1.1429554 | 1.1209203 | 1.0787000 | 27 |
| 23 | 1 173 1317 | 1.149 3 - 155 | 1.1273045 | 1.0841954 | 28 |
| 29 | 1 1801567 | 1.1553402 | 1.1332425 | 1.0899169 | 29 |
| 30 | 1 1867439 | 1.1623776 | 1.1387709 | 1.0937382 | 30 |
| 31 | 1.1929264 | 1.1580237 | 1.1439225 | 1.0980140 | 31 |
| 32 | 1.1987305 | 1.1733085 | 1.1487273 | 1.1019722 | 32 |
| 33 | 1 2041892 | 1.1782593 | 1.1532113 | 1.1056393 | 33 |
| 34 | 1.2093247 | 1.1829005 | 1.1574007 | 1.1090385 | 34 |
| 35 | 12141599 | 1.1872542 | 1.1613155 | 1.1121917 | 35 |
| 36 | 1.2187154 | 1.1913411 | 1.1649767 | 9.1151179 | 36 |
| 37 | 1.2230099 | 1.1951798 | 1.1684026 | 1.1178350 | 37 |
| 38 | 1 22270509 | 1.1987873 | 1.1796909 | 1.1203592 | 38 |
| 39 | 1.2303640 | 12021793 | 1.1745143 | 1.1227049 | 39 |
| 40 | : 2344942 | 1.2053702 | 1.1774297 | 1.1248858 | 40 |
| 41 | 9.2379047 | , 2083732 | 1.1800590 | 1.1269142 | 41 |
| 42 | 1 2411289 | 1.2192007 | 1.1825443 | 1.1288014 | 42 |
| 43 | 12641759 | 1.2138538 | 9.184 8665 | 1.1305577 | 43 |
| 44 | 1.2470589 | 1.215 3732 | 1.1870462 | 1.1321927 | 44 |
| 45 | 9.2497869 | 1.2987383 | 1.1890924 | 1.1337152 | 45 |
| 45 | , 2523691 | 1.2209584 | 1.1990940 | 1.1351333 | 45 |
| 47 | 12548142 | 1.2230717 | 1.1928191 | 1.1354545 | 47 |
| 48 | 1 2571302 | 1.2250560 | 1.1945150 | 1.1375855 | 48 |
| 49 | 12593244 | 1.2259284 | 1.1951090 | 1.1388330 | 49 |
| 50 | 1 2614037 | 1.2285959 | 1.1976075 | 1.1399026 | 50 |

Logarithm of Present Value of 1 per Annum at Compound Interest
TABLE NIV.
$\log a_{\bar{n}}$

| $n$ | $5 \sim \sim$ | $5 \frac{1}{2} \sim_{c}$ | $6^{c_{c}}$ | - ${ }^{\text {c }}$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 1.2633751 | 1.2303646 | 1.1990164 | 1.1408997 | 51 |
| 52 | 1.2652441 | 1.2319403 | 1.2003412 | 1.1418298 | 52 |
| 53 | 1.2670168 | 1.2334289 | 1.2015874 | 1.1426972 | 53 |
| 54 | 1.2686984 | 1.2348348 | 1.2027601 | 1.1435059 | 54 |
| 55 | 1.2702937 | 1.2361634 | 1.2038631 | 1.1442609 | 55 |
| 56 | 1.2718077 | 1.2374191 | 1.2049012 | 1.1449650 | 56 |
| 57 | 1.2732448 | 1.2386060 | 1.2058785 | 1.1456221 | 57 |
| 58 | 1.2746089 | 1.2397278 | 1.2067983 | 1.1462353 | 58 |
| 59 | 1.2759042 | 1.2407888 | 1.2076642 | 1.1468076 | 59 |
| 60 | 1.2771343 | 1.2417918 | 1.2084797 | 1.1473417 | 60 |
| 61 | 1.2783026 | 1.2427404 | 1.2092476 | 1.1478403 | 61 |
| 62 | 1.2794121 | 1.2436376 | 1.2099707 | 1.1483058 | 62 |
| 63 | 1.2804663 | 1.2444866 | 1.2106517 | 1.1487405 | 63 |
| 64 | 1.2814679 | 1.2452896 | 1.21129 .33 | 1.1491464 | 64 |
| 65 | 1.2824197 | 1.2460495 | 1.2118976 | 1.1495251 | 65 |
| 66 | 1.2833242 | 1.2467683 | 1.2124670 | 1.1498790 | 66 |
| 67 | 1.2841840 | 1.2474488 | 1.2130036 | 1.1502094 | 67 |
| 68 | 1.2850011 | 1.2480927 | 1.2135090 | 1.1505178 | 68 |
| 69 | 1.2857780 | 1.2487023 | 1.2139855 | 1.1508060 | 69 |
| 70 | 1.2865166 | 1.2492791 | 1.2144342 | 1.1510752 | 70 |
| 71 | 1.2872188 | 1.2498252 | 1.2148573 | 1.1513266 | 71 |
| 72 | 1.2878865 | 1.2503424 | 1.2152562 | 1.1515613 | 72 |
| 73 | 1.2885215 | 1.2508319 | 1.2156320 | 1.1517806 | 73 |
| 74 | 1.2891254 | 1.2512953 | 1.2159863 | 1.1519856 | 74 |
| 75 | 1.2896997 | 1.2517342 | 1.2163203 | 1.1521770 | 75 |
| 76 | 1.2902461 | 1.2521498 | 1.2166350 | 1.1523558 | 76 |
| 77 | 1.2907656 | 1.2525433 | 1.2169319 | 1.1525228 | 77 |
| 78 | 1.2912600 | 1.2529161 | 1.2172117 | 1.1526787 | 78 |
| 79 | 1.2917301 | 1.2532691 | 1.2174754 | 1.1528247 | 79 |
| 80 | 1.2921776 | 1.2536032 | 1.2177242 | 1.1529609 | 80 |
| 81 | 1.2926033 | 1.2539200 | 1.2179588 | 1.1530881 | 81 |
| 82 | 1.2930083 | 1.2542200 | 1.2181797 | 1.1532070 | 82 |
| 83 | 1.2933937 | 1.2545040 | 1.2183884 | 1.1533181 | 83 |
| 84 | 1.2937604 | 1.2547732 | 1.2185848 | 1.1534218 | 84 |
| 85 | 1.2941094 | 1.2550280 | 1.2187704 | 1.1535188 | 85 |
| 86 | 1.2944413 | 1.2552696 | 1.2189451 | 1.1536094 | 86 |
| 87 | 1.2947573 | 1.2554984 | 1.2191101 | 1.1536941 | 87 |
| 88 | 1.2950581 | 1.2557152 | 1.2192656 | 1.1537734 | 88 |
| 89 | 1.2953444 | 1.2559206 | 1.2194121 | 1.1538471 | 89 |
| 90 | 1.2956168 | 1.2561149 | 1.2195504 | 1.1539163 | 90 |
| 91 | 1.2958761 | 1.2562993 | 1.2196809 | 1.1539809 | 91 |
| 92 | 1.2961228 | 1.2564740 | 1.2198039 | 1.1540412 | 92 |
| 93 | 1.2963579 | 1.2566395 | 1.2199199 | 1.1540976 | 93 |
| 94 | 1.2965815 | 1.2567963 | 1.2200293 | 1.1541503 | 94 |
| 95 | 1.2967943 | 1.2569449 | 1.2201323 | 1.1541993 | 95 |
| 96 | 1.2969969 | 1.2570857 | 1.2202297 | 1.1542454 | 96 |
| 97 | 1.2971899 | 1.2572190 | 1.2203216 | 1.1542885 | 97 |
| 98 | 1.2973735 | 1.2573454 | 1.2204082 | 1.1543287 | 98 |
| 99 | 1.2975484 | 1.2574652 | 1.2204898 | 1.1543661 | 99 |
| 100 | 1.2977148 | 1.2575787 | 1.2205670 | 1.1544011 | 100 |

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