

0.25% **TABLE 1** **Discrete Cash Flow: Compound Interest Factors** **0.25%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0025 | 0.9975 | 1.00000 | 1.0000 | 1.00250 | 0.9975 | | |
| 2 | 1.0050 | 0.9950 | 0.49938 | 2.0025 | 0.50188 | 1.9925 | 0.9950 | 0.4994 |
| 3 | 1.0075 | 0.9925 | 0.33250 | 3.0075 | 0.33500 | 2.9851 | 2.9801 | 0.9983 |
| 4 | 1.0100 | 0.9901 | 0.24906 | 4.0150 | 0.25156 | 3.9751 | 5.9503 | 1.4969 |
| 5 | 1.0126 | 0.9876 | 0.19900 | 5.0251 | 0.20150 | 4.9627 | 9.9007 | 1.9950 |
| 6 | 1.0151 | 0.9851 | 0.16563 | 6.0376 | 0.16813 | 5.9478 | 14.8263 | 2.4927 |
| 7 | 1.0176 | 0.9827 | 0.14179 | 7.0527 | 0.14429 | 6.9305 | 20.7223 | 2.9900 |
| 8 | 1.0202 | 0.9802 | 0.12391 | 8.0704 | 0.12641 | 7.9107 | 27.5839 | 3.4869 |
| 9 | 1.0227 | 0.9778 | 0.11000 | 9.0905 | 0.11250 | 8.8885 | 35.4061 | 3.9834 |
| 10 | 1.0253 | 0.9753 | 0.09888 | 10.1133 | 0.10138 | 9.8639 | 44.1842 | 4.4794 |
| 11 | 1.0278 | 0.9729 | 0.08978 | 11.1385 | 0.09228 | 10.8368 | 53.9133 | 4.9750 |
| 12 | 1.0304 | 0.9705 | 0.08219 | 12.1664 | 0.08469 | 11.8073 | 64.5886 | 5.4702 |
| 13 | 1.0330 | 0.9681 | 0.07578 | 13.1968 | 0.07828 | 12.7753 | 76.2053 | 5.9650 |
| 14 | 1.0356 | 0.9656 | 0.07028 | 14.2298 | 0.07278 | 13.7410 | 88.7587 | 6.4594 |
| 15 | 1.0382 | 0.9632 | 0.06551 | 15.2654 | 0.06801 | 14.7042 | 102.2441 | 6.9534 |
| 16 | 1.0408 | 0.9608 | 0.06134 | 16.3035 | 0.06384 | 15.6650 | 116.6567 | 7.4469 |
| 17 | 1.0434 | 0.9584 | 0.05766 | 17.3443 | 0.06016 | 16.6235 | 131.9917 | 7.9401 |
| 18 | 1.0460 | 0.9561 | 0.05438 | 18.3876 | 0.05688 | 17.5795 | 148.2446 | 8.4328 |
| 19 | 1.0486 | 0.9537 | 0.05146 | 19.4336 | 0.05396 | 18.5332 | 165.4106 | 8.9251 |
| 20 | 1.0512 | 0.9513 | 0.04882 | 20.4822 | 0.05132 | 19.4845 | 183.4851 | 9.4170 |
| 21 | 1.0538 | 0.9489 | 0.04644 | 21.5334 | 0.04894 | 20.4334 | 202.4634 | 9.9085 |
| 22 | 1.0565 | 0.9466 | 0.04427 | 22.5872 | 0.04677 | 21.3800 | 222.3410 | 10.3995 |
| 23 | 1.0591 | 0.9442 | 0.04229 | 23.6437 | 0.04479 | 22.3241 | 243.1131 | 10.8901 |
| 24 | 1.0618 | 0.9418 | 0.04048 | 24.7028 | 0.04298 | 23.2660 | 264.7753 | 11.3804 |
| 25 | 1.0644 | 0.9395 | 0.03881 | 25.7646 | 0.04131 | 24.2055 | 287.3230 | 11.8702 |
| 26 | 1.0671 | 0.9371 | 0.03727 | 26.8290 | 0.03977 | 25.1426 | 310.7516 | 12.3596 |
| 27 | 1.0697 | 0.9348 | 0.03585 | 27.8961 | 0.03835 | 26.0774 | 335.0566 | 12.8485 |
| 28 | 1.0724 | 0.9325 | 0.03452 | 28.9658 | 0.03702 | 27.0099 | 360.2334 | 13.3371 |
| 29 | 1.0751 | 0.9301 | 0.03329 | 30.0382 | 0.03579 | 27.9400 | 386.2776 | 13.8252 |
| 30 | 1.0778 | 0.9278 | 0.03214 | 31.1133 | 0.03464 | 28.8679 | 413.1847 | 14.3130 |
| 36 | 1.0941 | 0.9140 | 0.02658 | 37.6206 | 0.02908 | 34.3865 | 592.4988 | 17.2306 |
| 40 | 1.1050 | 0.9050 | 0.02380 | 42.0132 | 0.02630 | 38.0199 | 728.7399 | 19.1673 |
| 48 | 1.1273 | 0.8871 | 0.01963 | 50.9312 | 0.02213 | 45.1787 | 1040.06 | 23.0209 |
| 50 | 1.1330 | 0.8826 | 0.01880 | 53.1887 | 0.02130 | 46.9462 | 1125.78 | 23.9802 |
| 52 | 1.1386 | 0.8782 | 0.01803 | 55.4575 | 0.02053 | 48.7048 | 1214.59 | 24.9377 |
| 55 | 1.1472 | 0.8717 | 0.01698 | 58.8819 | 0.01948 | 51.3264 | 1353.53 | 26.3710 |
| 60 | 1.1616 | 0.8609 | 0.01547 | 64.6467 | 0.01797 | 55.6524 | 1600.08 | 28.7514 |
| 72 | 1.1969 | 0.8355 | 0.01269 | 78.7794 | 0.01519 | 65.8169 | 2265.56 | 34.4221 |
| 75 | 1.2059 | 0.8292 | 0.01214 | 82.3792 | 0.01464 | 68.3108 | 2447.61 | 35.8305 |
| 84 | 1.2334 | 0.8108 | 0.01071 | 93.3419 | 0.01321 | 75.6813 | 3029.76 | 40.0331 |
| 90 | 1.2520 | 0.7987 | 0.00992 | 100.7885 | 0.01242 | 80.5038 | 3446.87 | 42.8162 |
| 96 | 1.2709 | 0.7869 | 0.00923 | 108.3474 | 0.01173 | 85.2546 | 3886.28 | 45.5844 |
| 100 | 1.2836 | 0.7790 | 0.00881 | 113.4500 | 0.01131 | 88.3825 | 4191.24 | 47.4216 |
| 108 | 1.3095 | 0.7636 | 0.00808 | 123.8093 | 0.01058 | 94.5453 | 4829.01 | 51.0762 |
| 120 | 1.3494 | 0.7411 | 0.00716 | 139.7414 | 0.00966 | 103.5618 | 5852.11 | 56.5084 |
| 132 | 1.3904 | 0.7192 | 0.00640 | 156.1582 | 0.00890 | 112.3121 | 6950.01 | 61.8813 |
| 144 | 1.4327 | 0.6980 | 0.00578 | 173.0743 | 0.00828 | 120.8041 | 8117.41 | 67.1949 |
| 240 | 1.8208 | 0.5492 | 0.00305 | 328.3020 | 0.00555 | 180.3109 | 19399 | 107.5863 |
| 360 | 2.4568 | 0.4070 | 0.00172 | 582.7369 | 0.00422 | 237.1894 | 36264 | 152.8902 |
| 480 | 3.3151 | 0.3016 | 0.00108 | 926.0595 | 0.00358 | 279.3418 | 53821 | 192.6699 |

0.5%

TABLE 2 Discrete Cash Flow: Compound Interest Factors

0.5%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0050 | 0.9950 | 1.00000 | 1.0000 | 1.00500 | 0.9950 | | |
| 2 | 1.0100 | 0.9901 | 0.49875 | 2.0050 | 0.50375 | 1.9851 | 0.9901 | 0.4988 |
| 3 | 1.0151 | 0.9851 | 0.33167 | 3.0150 | 0.33667 | 2.9702 | 2.9604 | 0.9967 |
| 4 | 1.0202 | 0.9802 | 0.24813 | 4.0301 | 0.25313 | 3.9505 | 5.9011 | 1.4938 |
| 5 | 1.0253 | 0.9754 | 0.19801 | 5.0503 | 0.20301 | 4.9259 | 9.8026 | 1.9900 |
| 6 | 1.0304 | 0.9705 | 0.16460 | 6.0755 | 0.16960 | 5.8964 | 14.6552 | 2.4855 |
| 7 | 1.0355 | 0.9657 | 0.14073 | 7.1059 | 0.14573 | 6.8621 | 20.4493 | 2.9801 |
| 8 | 1.0407 | 0.9609 | 0.12283 | 8.1414 | 0.12783 | 7.8230 | 27.1755 | 3.4738 |
| 9 | 1.0459 | 0.9561 | 0.10891 | 9.1821 | 0.11391 | 8.7791 | 34.8244 | 3.9668 |
| 10 | 1.0511 | 0.9513 | 0.09777 | 10.2280 | 0.10277 | 9.7304 | 43.3865 | 4.4589 |
| 11 | 1.0564 | 0.9466 | 0.08866 | 11.2792 | 0.09366 | 10.6770 | 52.8526 | 4.9501 |
| 12 | 1.0617 | 0.9419 | 0.08107 | 12.3356 | 0.08607 | 11.6189 | 63.2136 | 5.4406 |
| 13 | 1.0670 | 0.9372 | 0.07464 | 13.3972 | 0.07964 | 12.5562 | 74.4602 | 5.9302 |
| 14 | 1.0723 | 0.9326 | 0.06914 | 14.4642 | 0.07414 | 13.4887 | 86.5835 | 6.4190 |
| 15 | 1.0777 | 0.9279 | 0.06436 | 15.5365 | 0.06936 | 14.4166 | 99.5743 | 6.9069 |
| 16 | 1.0831 | 0.9233 | 0.06019 | 16.6142 | 0.06519 | 15.3399 | 113.4238 | 7.3940 |
| 17 | 1.0885 | 0.9187 | 0.05651 | 17.6973 | 0.06151 | 16.2586 | 128.1231 | 7.8803 |
| 18 | 1.0939 | 0.9141 | 0.05323 | 18.7858 | 0.05823 | 17.1728 | 143.6634 | 8.3658 |
| 19 | 1.0994 | 0.9096 | 0.05030 | 19.8797 | 0.05530 | 18.0824 | 160.0360 | 8.8504 |
| 20 | 1.1049 | 0.9051 | 0.04767 | 20.9791 | 0.05267 | 18.9874 | 177.2322 | 9.3342 |
| 21 | 1.1104 | 0.9006 | 0.04528 | 22.0840 | 0.05028 | 19.8880 | 195.2434 | 9.8172 |
| 22 | 1.1160 | 0.8961 | 0.04311 | 23.1944 | 0.04811 | 20.7841 | 214.0611 | 10.2993 |
| 23 | 1.1216 | 0.8916 | 0.04113 | 24.3104 | 0.04613 | 21.6757 | 233.6768 | 10.7806 |
| 24 | 1.1272 | 0.8872 | 0.03932 | 25.4320 | 0.04432 | 22.5629 | 254.0820 | 11.2611 |
| 25 | 1.1328 | 0.8828 | 0.03765 | 26.5591 | 0.04265 | 23.4456 | 275.2686 | 11.7407 |
| 26 | 1.1385 | 0.8784 | 0.03611 | 27.6919 | 0.04111 | 24.3240 | 297.2281 | 12.2195 |
| 27 | 1.1442 | 0.8740 | 0.03469 | 28.8304 | 0.03969 | 25.1980 | 319.9523 | 12.6975 |
| 28 | 1.1499 | 0.8697 | 0.03336 | 29.9745 | 0.03836 | 26.0677 | 343.4332 | 13.1747 |
| 29 | 1.1556 | 0.8653 | 0.03213 | 31.1244 | 0.03713 | 26.9330 | 367.6625 | 13.6510 |
| 30 | 1.1614 | 0.8610 | 0.03098 | 32.2800 | 0.03598 | 27.7941 | 392.6324 | 14.1265 |
| 36 | 1.1967 | 0.8356 | 0.02542 | 39.3361 | 0.03042 | 32.8710 | 557.5598 | 16.9621 |
| 40 | 1.2208 | 0.8191 | 0.02265 | 44.1588 | 0.02765 | 36.1722 | 681.3347 | 18.8359 |
| 48 | 1.2705 | 0.7871 | 0.01849 | 54.0978 | 0.02349 | 42.5803 | 959.9188 | 22.5437 |
| 50 | 1.2832 | 0.7793 | 0.01765 | 56.6452 | 0.02265 | 44.1428 | 1035.70 | 23.4624 |
| 52 | 1.2961 | 0.7716 | 0.01689 | 59.2180 | 0.02189 | 45.6897 | 1113.82 | 24.3778 |
| 55 | 1.3156 | 0.7601 | 0.01584 | 63.1258 | 0.02084 | 47.9814 | 1235.27 | 25.7447 |
| 60 | 1.3489 | 0.7414 | 0.01433 | 69.7700 | 0.01933 | 51.7256 | 1448.65 | 28.0064 |
| 72 | 1.4320 | 0.6983 | 0.01157 | 86.4089 | 0.01657 | 60.3395 | 2012.35 | 33.3504 |
| 75 | 1.4536 | 0.6879 | 0.01102 | 90.7265 | 0.01602 | 62.4136 | 2163.75 | 34.6679 |
| 84 | 1.5204 | 0.6577 | 0.00961 | 104.0739 | 0.01461 | 68.4530 | 2640.66 | 38.5763 |
| 90 | 1.5666 | 0.6383 | 0.00883 | 113.3109 | 0.01383 | 72.3313 | 2976.08 | 41.1451 |
| 96 | 1.6141 | 0.6195 | 0.00814 | 122.8285 | 0.01314 | 76.0952 | 3324.18 | 43.6845 |
| 100 | 1.6467 | 0.6073 | 0.00773 | 129.3337 | 0.01273 | 78.5426 | 3562.79 | 45.3613 |
| 108 | 1.7137 | 0.5835 | 0.00701 | 142.7399 | 0.01201 | 83.2934 | 4054.37 | 48.6758 |
| 120 | 1.8194 | 0.5496 | 0.00610 | 163.8793 | 0.01110 | 90.0735 | 4823.51 | 53.5508 |
| 132 | 1.9316 | 0.5177 | 0.00537 | 186.3226 | 0.01037 | 96.4596 | 5624.59 | 58.3103 |
| 144 | 2.0508 | 0.4876 | 0.00476 | 210.1502 | 0.00976 | 102.4747 | 6451.31 | 62.9551 |
| 240 | 3.3102 | 0.3021 | 0.00216 | 462.0409 | 0.00716 | 139.5808 | 13416 | 96.1131 |
| 360 | 6.0226 | 0.1660 | 0.00100 | 1004.52 | 0.00600 | 166.7916 | 21403 | 128.3236 |
| 480 | 10.9575 | 0.0913 | 0.00050 | 1991.49 | 0.00550 | 181.7476 | 27588 | 151.7949 |

0.75%

TABLE 3 Discrete Cash Flow: Compound Interest Factors

0.75%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0075 | 0.9926 | 1.00000 | 1.0000 | 1.00750 | 0.9926 | | |
| 2 | 1.0151 | 0.9852 | 0.49813 | 2.0075 | 0.50563 | 1.9777 | 0.9852 | 0.4981 |
| 3 | 1.0227 | 0.9778 | 0.33085 | 3.0226 | 0.33835 | 2.9556 | 2.9408 | 0.9950 |
| 4 | 1.0303 | 0.9706 | 0.24721 | 4.0452 | 0.25471 | 3.9261 | 5.8525 | 1.4907 |
| 5 | 1.0381 | 0.9633 | 0.19702 | 5.0756 | 0.20452 | 4.8894 | 9.7058 | 1.9851 |
| 6 | 1.0459 | 0.9562 | 0.16357 | 6.1136 | 0.17107 | 5.8456 | 14.4866 | 2.4782 |
| 7 | 1.0537 | 0.9490 | 0.13967 | 7.1595 | 0.14717 | 6.7946 | 20.1808 | 2.9701 |
| 8 | 1.0616 | 0.9420 | 0.12176 | 8.2132 | 0.12926 | 7.7366 | 26.7747 | 3.4608 |
| 9 | 1.0696 | 0.9350 | 0.10782 | 9.2748 | 0.11532 | 8.6716 | 34.2544 | 3.9502 |
| 10 | 1.0776 | 0.9280 | 0.09667 | 10.3443 | 0.10417 | 9.5996 | 42.6064 | 4.4384 |
| 11 | 1.0857 | 0.9211 | 0.08755 | 11.4219 | 0.09505 | 10.5207 | 51.8174 | 4.9253 |
| 12 | 1.0938 | 0.9142 | 0.07995 | 12.5076 | 0.08745 | 11.4349 | 61.8740 | 5.4110 |
| 13 | 1.1020 | 0.9074 | 0.07352 | 13.6014 | 0.08102 | 12.3423 | 72.7632 | 5.8954 |
| 14 | 1.1103 | 0.9007 | 0.06801 | 14.7034 | 0.07551 | 13.2430 | 84.4720 | 6.3786 |
| 15 | 1.1186 | 0.8940 | 0.06324 | 15.8137 | 0.07074 | 14.1370 | 96.9876 | 6.8606 |
| 16 | 1.1270 | 0.8873 | 0.05906 | 16.9323 | 0.06656 | 15.0243 | 110.2973 | 7.3413 |
| 17 | 1.1354 | 0.8807 | 0.05537 | 18.0593 | 0.06287 | 15.9050 | 124.3887 | 7.8207 |
| 18 | 1.1440 | 0.8742 | 0.05210 | 19.1947 | 0.05960 | 16.7792 | 139.2494 | 8.2989 |
| 19 | 1.1525 | 0.8676 | 0.04917 | 20.3387 | 0.05667 | 17.6468 | 154.8671 | 8.7759 |
| 20 | 1.1612 | 0.8612 | 0.04653 | 21.4912 | 0.05403 | 18.5080 | 171.2297 | 9.2516 |
| 21 | 1.1699 | 0.8548 | 0.04415 | 22.6524 | 0.05165 | 19.3628 | 188.3253 | 9.7261 |
| 22 | 1.1787 | 0.8484 | 0.04198 | 23.8223 | 0.04948 | 20.2112 | 206.1420 | 10.1994 |
| 23 | 1.1875 | 0.8421 | 0.04000 | 25.0010 | 0.04750 | 21.0533 | 224.6682 | 10.6714 |
| 24 | 1.1964 | 0.8358 | 0.03818 | 26.1885 | 0.04568 | 21.8891 | 243.8923 | 11.1422 |
| 25 | 1.2054 | 0.8296 | 0.03652 | 27.3849 | 0.04402 | 22.7188 | 263.8029 | 11.6117 |
| 26 | 1.2144 | 0.8234 | 0.03498 | 28.5903 | 0.04248 | 23.5422 | 284.3888 | 12.0800 |
| 27 | 1.2235 | 0.8173 | 0.03355 | 29.8047 | 0.04105 | 24.3595 | 305.6387 | 12.5470 |
| 28 | 1.2327 | 0.8112 | 0.03223 | 31.0282 | 0.03973 | 25.1707 | 327.5416 | 13.0128 |
| 29 | 1.2420 | 0.8052 | 0.03100 | 32.2609 | 0.03850 | 25.9759 | 350.0867 | 13.4774 |
| 30 | 1.2513 | 0.7992 | 0.02985 | 33.5029 | 0.03735 | 26.7751 | 373.2631 | 13.9407 |
| 36 | 1.3086 | 0.7641 | 0.02430 | 41.1527 | 0.03180 | 31.4468 | 524.9924 | 16.6946 |
| 40 | 1.3483 | 0.7416 | 0.02153 | 46.4465 | 0.02903 | 34.4469 | 637.4693 | 18.5058 |
| 48 | 1.4314 | 0.6986 | 0.01739 | 57.5207 | 0.02489 | 40.1848 | 886.8404 | 22.0691 |
| 50 | 1.4530 | 0.6883 | 0.01656 | 60.3943 | 0.02406 | 41.5664 | 953.8486 | 22.9476 |
| 52 | 1.4748 | 0.6780 | 0.01580 | 63.3111 | 0.02330 | 42.9276 | 1022.59 | 23.8211 |
| 55 | 1.5083 | 0.6630 | 0.01476 | 67.7688 | 0.02226 | 44.9316 | 1128.79 | 25.1223 |
| 60 | 1.5657 | 0.6387 | 0.01326 | 75.4241 | 0.02076 | 48.1734 | 1313.52 | 27.2665 |
| 72 | 1.7126 | 0.5839 | 0.01053 | 95.0070 | 0.01803 | 55.4768 | 1791.25 | 32.2882 |
| 75 | 1.7514 | 0.5710 | 0.00998 | 100.1833 | 0.01748 | 57.2027 | 1917.22 | 33.5163 |
| 84 | 1.8732 | 0.5338 | 0.00859 | 116.4269 | 0.01609 | 62.1540 | 2308.13 | 37.1357 |
| 90 | 1.9591 | 0.5104 | 0.00782 | 127.8790 | 0.01532 | 65.2746 | 2578.00 | 39.4946 |
| 96 | 2.0489 | 0.4881 | 0.00715 | 139.8562 | 0.01465 | 68.2584 | 2853.94 | 41.8107 |
| 100 | 2.1111 | 0.4737 | 0.00675 | 148.1445 | 0.01425 | 70.1746 | 3040.75 | 43.3311 |
| 108 | 2.2411 | 0.4462 | 0.00604 | 165.4832 | 0.01354 | 73.8394 | 3419.90 | 46.3154 |
| 120 | 2.4514 | 0.4079 | 0.00517 | 193.5143 | 0.01267 | 78.9417 | 3998.56 | 50.6521 |
| 132 | 2.6813 | 0.3730 | 0.00446 | 224.1748 | 0.01196 | 83.6064 | 4583.57 | 54.8232 |
| 144 | 2.9328 | 0.3410 | 0.00388 | 257.7116 | 0.01138 | 87.8711 | 5169.58 | 58.8314 |
| 240 | 6.0092 | 0.1664 | 0.00150 | 667.8869 | 0.00900 | 111.1450 | 9494.12 | 85.4210 |
| 360 | 14.7306 | 0.0679 | 0.00055 | 1830.74 | 0.00805 | 124.2819 | 13312 | 107.1145 |
| 480 | 36.1099 | 0.0277 | 0.00021 | 4681.32 | 0.00771 | 129.6409 | 15513 | 119.6620 |

1%

TABLE 4 Discrete Cash Flow: Compound Interest Factors

1%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0100 | 0.9901 | 1.00000 | 1.0000 | 1.01000 | 0.9901 | | |
| 2 | 1.0201 | 0.9803 | 0.49751 | 2.0100 | 0.50751 | 1.9704 | 0.9803 | 0.4975 |
| 3 | 1.0303 | 0.9706 | 0.33002 | 3.0301 | 0.34002 | 2.9410 | 2.9215 | 0.9934 |
| 4 | 1.0406 | 0.9610 | 0.24628 | 4.0604 | 0.25628 | 3.9020 | 5.8044 | 1.4876 |
| 5 | 1.0510 | 0.9515 | 0.19604 | 5.1010 | 0.20604 | 4.8534 | 9.6103 | 1.9801 |
| 6 | 1.0615 | 0.9420 | 0.16255 | 6.1520 | 0.17255 | 5.7955 | 14.3205 | 2.4710 |
| 7 | 1.0721 | 0.9327 | 0.13863 | 7.2135 | 0.14863 | 6.7282 | 19.9168 | 2.9602 |
| 8 | 1.0829 | 0.9235 | 0.12069 | 8.2857 | 0.13069 | 7.6517 | 26.3812 | 3.4478 |
| 9 | 1.0937 | 0.9143 | 0.10674 | 9.3685 | 0.11674 | 8.5660 | 33.6959 | 3.9337 |
| 10 | 1.1046 | 0.9053 | 0.09558 | 10.4622 | 0.10558 | 9.4713 | 41.8435 | 4.4179 |
| 11 | 1.1157 | 0.8963 | 0.08645 | 11.5668 | 0.09645 | 10.3676 | 50.8067 | 4.9005 |
| 12 | 1.1268 | 0.8874 | 0.07885 | 12.6825 | 0.08885 | 11.2551 | 60.5687 | 5.3815 |
| 13 | 1.1381 | 0.8787 | 0.07241 | 13.8093 | 0.08241 | 12.1337 | 71.1126 | 5.8607 |
| 14 | 1.1495 | 0.8700 | 0.06690 | 14.9474 | 0.07690 | 13.0037 | 82.4221 | 6.3384 |
| 15 | 1.1610 | 0.8613 | 0.06212 | 16.0969 | 0.07212 | 13.8651 | 94.4810 | 6.8143 |
| 16 | 1.1726 | 0.8528 | 0.05794 | 17.2579 | 0.06794 | 14.7179 | 107.2734 | 7.2886 |
| 17 | 1.1843 | 0.8444 | 0.05426 | 18.4304 | 0.06426 | 15.5623 | 120.7834 | 7.7613 |
| 18 | 1.1961 | 0.8360 | 0.05098 | 19.6147 | 0.06098 | 16.3983 | 134.9957 | 8.2323 |
| 19 | 1.2081 | 0.8277 | 0.04805 | 20.8109 | 0.05805 | 17.2260 | 149.8950 | 8.7017 |
| 20 | 1.2202 | 0.8195 | 0.04542 | 22.0190 | 0.05542 | 18.0456 | 165.4664 | 9.1694 |
| 21 | 1.2324 | 0.8114 | 0.04303 | 23.2392 | 0.05303 | 18.8570 | 181.6950 | 9.6354 |
| 22 | 1.2447 | 0.8034 | 0.04086 | 24.4716 | 0.05086 | 19.6604 | 198.5663 | 10.0998 |
| 23 | 1.2572 | 0.7954 | 0.03889 | 25.7163 | 0.04889 | 20.4558 | 216.0660 | 10.5626 |
| 24 | 1.2697 | 0.7876 | 0.03707 | 26.9735 | 0.04707 | 21.2434 | 234.1800 | 11.0237 |
| 25 | 1.2824 | 0.7798 | 0.03541 | 28.2432 | 0.04541 | 22.0232 | 252.8945 | 11.4831 |
| 26 | 1.2953 | 0.7720 | 0.03387 | 29.5256 | 0.04387 | 22.7952 | 272.1957 | 11.9409 |
| 27 | 1.3082 | 0.7644 | 0.03245 | 30.8209 | 0.04245 | 23.5596 | 292.0702 | 12.3971 |
| 28 | 1.3213 | 0.7568 | 0.03112 | 32.1291 | 0.04112 | 24.3164 | 312.5047 | 12.8516 |
| 29 | 1.3345 | 0.7493 | 0.02990 | 33.4504 | 0.03990 | 25.0658 | 333.4863 | 13.3044 |
| 30 | 1.3478 | 0.7419 | 0.02875 | 34.7849 | 0.03875 | 25.8077 | 355.0021 | 13.7557 |
| 36 | 1.4308 | 0.6989 | 0.02321 | 43.0769 | 0.03321 | 30.1075 | 494.6207 | 16.4285 |
| 40 | 1.4889 | 0.6717 | 0.02046 | 48.8864 | 0.03046 | 32.8347 | 596.8561 | 18.1776 |
| 48 | 1.6122 | 0.6203 | 0.01633 | 61.2226 | 0.02633 | 37.9740 | 820.1460 | 21.5976 |
| 50 | 1.6446 | 0.6080 | 0.01551 | 64.4632 | 0.02551 | 39.1961 | 879.4176 | 22.4363 |
| 52 | 1.6777 | 0.5961 | 0.01476 | 67.7689 | 0.02476 | 40.3942 | 939.9175 | 23.2686 |
| 55 | 1.7285 | 0.5785 | 0.01373 | 72.8525 | 0.02373 | 42.1472 | 1032.81 | 24.5049 |
| 60 | 1.8167 | 0.5504 | 0.01224 | 81.6697 | 0.02224 | 44.9550 | 1192.81 | 26.5333 |
| 72 | 2.0471 | 0.4885 | 0.00955 | 104.7099 | 0.01955 | 51.1504 | 1597.87 | 31.2386 |
| 75 | 2.1091 | 0.4741 | 0.00902 | 110.9128 | 0.01902 | 52.5871 | 1702.73 | 32.3793 |
| 84 | 2.3067 | 0.4335 | 0.00765 | 130.6723 | 0.01765 | 56.6485 | 2023.32 | 35.7170 |
| 90 | 2.4486 | 0.4084 | 0.00690 | 144.8633 | 0.01690 | 59.1609 | 2240.57 | 37.8724 |
| 96 | 2.5993 | 0.3847 | 0.00625 | 159.9273 | 0.01625 | 61.5277 | 2459.43 | 39.9727 |
| 100 | 2.7048 | 0.3697 | 0.00587 | 170.4814 | 0.01587 | 63.0289 | 2605.78 | 41.3426 |
| 108 | 2.9289 | 0.3414 | 0.00518 | 192.8926 | 0.01518 | 65.8578 | 2898.42 | 44.0103 |
| 120 | 3.3004 | 0.3030 | 0.00435 | 230.0387 | 0.01435 | 69.7005 | 3334.11 | 47.8349 |
| 132 | 3.7190 | 0.2689 | 0.00368 | 271.8959 | 0.01368 | 73.1108 | 3761.69 | 51.4520 |
| 144 | 4.1906 | 0.2386 | 0.00313 | 319.0616 | 0.01313 | 76.1372 | 4177.47 | 54.8676 |
| 240 | 10.8926 | 0.0918 | 0.00101 | 989.2554 | 0.01101 | 90.8194 | 6878.60 | 75.7393 |
| 360 | 35.9496 | 0.0278 | 0.00029 | 3494.96 | 0.01029 | 97.2183 | 8720.43 | 89.6995 |
| 480 | 118.6477 | 0.0084 | 0.00008 | 11765 | 0.01008 | 99.1572 | 9511.16 | 95.9200 |

| 1.25% | | TABLE 5 Discrete Cash Flow: Compound Interest Factors | | | | | | 1.25% |
|-------|---------------------------|---|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0125 | 0.9877 | 1.00000 | 1.0000 | 1.01250 | 0.9877 | | |
| 2 | 1.0252 | 0.9755 | 0.49680 | 2.0125 | 0.50939 | 1.9631 | 0.9755 | 0.4969 |
| 3 | 1.0380 | 0.9634 | 0.32920 | 3.0377 | 0.34170 | 2.9265 | 2.9023 | 0.9917 |
| 4 | 1.0509 | 0.9515 | 0.24536 | 4.0756 | 0.25786 | 3.8781 | 5.7569 | 1.4845 |
| 5 | 1.0641 | 0.9398 | 0.19506 | 5.1266 | 0.20756 | 4.8178 | 9.5160 | 1.9752 |
| 6 | 1.0774 | 0.9282 | 0.16153 | 6.1907 | 0.17403 | 5.7460 | 14.1569 | 2.4638 |
| 7 | 1.0909 | 0.9167 | 0.13759 | 7.2680 | 0.15009 | 6.6627 | 19.6571 | 2.9503 |
| 8 | 1.1045 | 0.9054 | 0.11963 | 8.3589 | 0.13213 | 7.5681 | 25.9949 | 3.4348 |
| 9 | 1.1183 | 0.8942 | 0.10567 | 9.4634 | 0.11817 | 8.4623 | 33.1487 | 3.9172 |
| 10 | 1.1323 | 0.8832 | 0.09450 | 10.5817 | 0.10700 | 9.3455 | 41.0973 | 4.3975 |
| 11 | 1.1464 | 0.8723 | 0.08537 | 11.7139 | 0.09787 | 10.2178 | 49.8201 | 4.8758 |
| 12 | 1.1608 | 0.8615 | 0.07776 | 12.8604 | 0.09026 | 11.0793 | 59.2967 | 5.3520 |
| 13 | 1.1753 | 0.8509 | 0.07132 | 14.0211 | 0.08382 | 11.9302 | 69.5072 | 5.8262 |
| 14 | 1.1900 | 0.8404 | 0.06581 | 15.1964 | 0.07831 | 12.7706 | 80.4320 | 6.2982 |
| 15 | 1.2048 | 0.8300 | 0.06103 | 16.3863 | 0.07353 | 13.6005 | 92.0519 | 6.7682 |
| 16 | 1.2199 | 0.8197 | 0.05685 | 17.5912 | 0.06935 | 14.4203 | 104.3481 | 7.2362 |
| 17 | 1.2351 | 0.8096 | 0.05316 | 18.8111 | 0.06566 | 15.2299 | 117.3021 | 7.7021 |
| 18 | 1.2506 | 0.7996 | 0.04988 | 20.0462 | 0.06238 | 16.0295 | 130.8958 | 8.1659 |
| 19 | 1.2662 | 0.7898 | 0.04696 | 21.2968 | 0.05946 | 16.8193 | 145.1115 | 8.6277 |
| 20 | 1.2820 | 0.7800 | 0.04432 | 22.5630 | 0.05682 | 17.5993 | 159.9316 | 9.0874 |
| 21 | 1.2981 | 0.7704 | 0.04194 | 23.8450 | 0.05444 | 18.3697 | 175.3392 | 9.5450 |
| 22 | 1.3143 | 0.7609 | 0.03977 | 25.1431 | 0.05227 | 19.1306 | 191.3174 | 10.0006 |
| 23 | 1.3307 | 0.7515 | 0.03780 | 26.4574 | 0.05030 | 19.8820 | 207.8499 | 10.4542 |
| 24 | 1.3474 | 0.7422 | 0.03599 | 27.7881 | 0.04849 | 20.6242 | 224.9204 | 10.9056 |
| 25 | 1.3642 | 0.7330 | 0.03432 | 29.1354 | 0.04682 | 21.3573 | 242.5132 | 11.3551 |
| 26 | 1.3812 | 0.7240 | 0.03279 | 30.4996 | 0.04529 | 22.0813 | 260.6128 | 11.8024 |
| 27 | 1.3985 | 0.7150 | 0.03137 | 31.8809 | 0.04387 | 22.7963 | 279.2040 | 12.2478 |
| 28 | 1.4160 | 0.7062 | 0.03005 | 33.2794 | 0.04255 | 23.5025 | 298.2719 | 12.6911 |
| 29 | 1.4337 | 0.6975 | 0.02882 | 34.6954 | 0.04132 | 24.2000 | 317.8019 | 13.1323 |
| 30 | 1.4516 | 0.6889 | 0.02768 | 36.1291 | 0.04018 | 24.8889 | 337.7797 | 13.5715 |
| 36 | 1.5639 | 0.6394 | 0.02217 | 45.1155 | 0.03467 | 28.8473 | 466.2830 | 16.1639 |
| 40 | 1.6436 | 0.6084 | 0.01942 | 51.4896 | 0.03192 | 31.3269 | 559.2320 | 17.8515 |
| 48 | 1.8154 | 0.5509 | 0.01533 | 65.2284 | 0.02783 | 35.9315 | 759.2296 | 21.1299 |
| 50 | 1.8610 | 0.5373 | 0.01452 | 68.8818 | 0.02702 | 37.0129 | 811.6738 | 21.9295 |
| 52 | 1.9078 | 0.5242 | 0.01377 | 72.6271 | 0.02627 | 38.0677 | 864.9409 | 22.7211 |
| 55 | 1.9803 | 0.5050 | 0.01275 | 78.4225 | 0.02525 | 39.6017 | 946.2277 | 23.8936 |
| 60 | 2.1072 | 0.4746 | 0.01129 | 88.5745 | 0.02379 | 42.0346 | 1084.84 | 25.8083 |
| 72 | 2.4459 | 0.4088 | 0.00865 | 115.6736 | 0.02115 | 47.2925 | 1428.46 | 30.2047 |
| 75 | 2.5388 | 0.3939 | 0.00812 | 123.1035 | 0.02062 | 48.4890 | 1515.79 | 31.2605 |
| 84 | 2.8391 | 0.3522 | 0.00680 | 147.1290 | 0.01930 | 51.8222 | 1778.84 | 34.3258 |
| 90 | 3.0588 | 0.3269 | 0.00607 | 164.7050 | 0.01857 | 53.8461 | 1953.83 | 36.2855 |
| 96 | 3.2955 | 0.3034 | 0.00545 | 183.6411 | 0.01795 | 55.7246 | 2127.52 | 38.1793 |
| 100 | 3.4634 | 0.2887 | 0.00507 | 197.0723 | 0.01757 | 56.9013 | 2242.24 | 39.4058 |
| 108 | 3.8253 | 0.2614 | 0.00442 | 226.0226 | 0.01692 | 59.0865 | 2468.26 | 41.7737 |
| 120 | 4.4402 | 0.2252 | 0.00363 | 275.2171 | 0.01613 | 61.9828 | 2796.57 | 45.1184 |
| 132 | 5.1540 | 0.1940 | 0.00301 | 332.3198 | 0.01551 | 64.4781 | 3109.35 | 48.2234 |
| 144 | 5.9825 | 0.1672 | 0.00251 | 398.6021 | 0.01501 | 66.6277 | 3404.61 | 51.0990 |
| 240 | 19.7155 | 0.0507 | 0.00067 | 1497.24 | 0.01317 | 75.9423 | 5101.53 | 67.1764 |
| 360 | 87.5410 | 0.0114 | 0.00014 | 6923.28 | 0.01264 | 79.0861 | 5997.90 | 75.8401 |
| 480 | 388.7007 | 0.0026 | 0.00003 | 31016 | 0.01253 | 79.7942 | 6284.74 | 78.7619 |

1.5%

TABLE 6 Discrete Cash Flow: Compound Interest Factors

1.5%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0150 | 0.9852 | 1.00000 | 1.0000 | 1.01500 | 0.9852 | | |
| 2 | 1.0302 | 0.9707 | 0.49628 | 2.0150 | 0.51128 | 1.9559 | 0.9707 | 0.4963 |
| 3 | 1.0457 | 0.9563 | 0.32838 | 3.0452 | 0.34338 | 2.9122 | 2.8833 | 0.9901 |
| 4 | 1.0614 | 0.9422 | 0.24444 | 4.0909 | 0.25944 | 3.8544 | 5.7098 | 1.4814 |
| 5 | 1.0773 | 0.9283 | 0.19409 | 5.1523 | 0.20909 | 4.7826 | 9.4229 | 1.9702 |
| 6 | 1.0934 | 0.9145 | 0.16053 | 6.2296 | 0.17553 | 5.6972 | 13.9956 | 2.4566 |
| 7 | 1.1098 | 0.9010 | 0.13656 | 7.3230 | 0.15156 | 6.5982 | 19.4018 | 2.9405 |
| 8 | 1.1265 | 0.8877 | 0.11858 | 8.4328 | 0.13358 | 7.4859 | 25.6157 | 3.4219 |
| 9 | 1.1434 | 0.8746 | 0.10461 | 9.5593 | 0.11961 | 8.3605 | 32.6125 | 3.9008 |
| 10 | 1.1605 | 0.8617 | 0.09343 | 10.7027 | 0.10843 | 9.2222 | 40.3675 | 4.3772 |
| 11 | 1.1779 | 0.8489 | 0.08429 | 11.8633 | 0.09929 | 10.0711 | 48.8568 | 4.8512 |
| 12 | 1.1956 | 0.8364 | 0.07668 | 13.0412 | 0.09168 | 10.9075 | 58.0571 | 5.3227 |
| 13 | 1.2136 | 0.8240 | 0.07024 | 14.2368 | 0.08524 | 11.7315 | 67.9454 | 5.7917 |
| 14 | 1.2318 | 0.8118 | 0.06472 | 15.4504 | 0.07972 | 12.5434 | 78.4994 | 6.2582 |
| 15 | 1.2502 | 0.7999 | 0.05994 | 16.6821 | 0.07494 | 13.3432 | 89.6974 | 6.7223 |
| 16 | 1.2690 | 0.7880 | 0.05577 | 17.9324 | 0.07077 | 14.1313 | 101.5178 | 7.1839 |
| 17 | 1.2880 | 0.7764 | 0.05208 | 19.2014 | 0.06708 | 14.9076 | 113.9400 | 7.6431 |
| 18 | 1.3073 | 0.7649 | 0.04881 | 20.4894 | 0.06381 | 15.6726 | 126.9435 | 8.0997 |
| 19 | 1.3270 | 0.7536 | 0.04588 | 21.7967 | 0.06088 | 16.4262 | 140.5084 | 8.5539 |
| 20 | 1.3469 | 0.7425 | 0.04325 | 23.1237 | 0.05825 | 17.1686 | 154.6154 | 9.0057 |
| 21 | 1.3671 | 0.7315 | 0.04087 | 24.4705 | 0.05587 | 17.9001 | 169.2453 | 9.4550 |
| 22 | 1.3876 | 0.7207 | 0.03870 | 25.8376 | 0.05370 | 18.6208 | 184.3798 | 9.9018 |
| 23 | 1.4084 | 0.7100 | 0.03673 | 27.2251 | 0.05173 | 19.3309 | 200.0006 | 10.3462 |
| 24 | 1.4295 | 0.6995 | 0.03492 | 28.6335 | 0.04992 | 20.0304 | 216.0901 | 10.7881 |
| 25 | 1.4509 | 0.6892 | 0.03326 | 30.0630 | 0.04826 | 20.7196 | 232.6310 | 11.2276 |
| 26 | 1.4727 | 0.6790 | 0.03173 | 31.5140 | 0.04673 | 21.3986 | 249.6065 | 11.6646 |
| 27 | 1.4948 | 0.6690 | 0.03032 | 32.9867 | 0.04532 | 22.0676 | 267.0002 | 12.0992 |
| 28 | 1.5172 | 0.6591 | 0.02900 | 34.4815 | 0.04400 | 22.7267 | 284.7958 | 12.5313 |
| 29 | 1.5400 | 0.6494 | 0.02778 | 35.9987 | 0.04278 | 23.3761 | 302.9779 | 12.9610 |
| 30 | 1.5631 | 0.6398 | 0.02664 | 37.5387 | 0.04164 | 24.0158 | 321.5310 | 13.3883 |
| 36 | 1.7091 | 0.5851 | 0.02115 | 47.2760 | 0.03615 | 27.6607 | 439.8303 | 15.9009 |
| 40 | 1.8140 | 0.5513 | 0.01843 | 54.2679 | 0.03343 | 29.9158 | 524.3568 | 17.5277 |
| 48 | 2.0435 | 0.4894 | 0.01437 | 69.5652 | 0.02937 | 34.0426 | 703.5462 | 20.6667 |
| 50 | 2.1052 | 0.4750 | 0.01357 | 73.6828 | 0.02857 | 34.9997 | 749.9636 | 21.4277 |
| 52 | 2.1689 | 0.4611 | 0.01283 | 77.9249 | 0.02783 | 35.9287 | 796.8774 | 22.1794 |
| 55 | 2.2679 | 0.4409 | 0.01183 | 84.5296 | 0.02683 | 37.2715 | 868.0285 | 23.2894 |
| 60 | 2.4432 | 0.4093 | 0.01039 | 96.2147 | 0.02539 | 39.3803 | 988.1674 | 25.0930 |
| 72 | 2.9212 | 0.3423 | 0.00781 | 128.0772 | 0.02281 | 43.8447 | 1279.79 | 29.1893 |
| 75 | 3.0546 | 0.3274 | 0.00730 | 136.9728 | 0.02230 | 44.8416 | 1352.56 | 30.1631 |
| 84 | 3.4926 | 0.2863 | 0.00602 | 166.1726 | 0.02102 | 47.5786 | 1568.51 | 32.9668 |
| 90 | 3.8189 | 0.2619 | 0.00532 | 187.9299 | 0.02032 | 49.2099 | 1709.54 | 34.7399 |
| 96 | 4.1758 | 0.2395 | 0.00472 | 211.7202 | 0.01972 | 50.7017 | 1847.47 | 36.4381 |
| 100 | 4.4320 | 0.2256 | 0.00437 | 228.8030 | 0.01937 | 51.6247 | 1937.45 | 37.5295 |
| 108 | 4.9927 | 0.2003 | 0.00376 | 266.1778 | 0.01876 | 53.3137 | 2112.13 | 39.6171 |
| 120 | 5.9693 | 0.1675 | 0.00302 | 331.2882 | 0.01802 | 55.4985 | 2359.71 | 42.5185 |
| 132 | 7.1370 | 0.1401 | 0.00244 | 409.1354 | 0.01744 | 57.3257 | 2588.71 | 45.1579 |
| 144 | 8.5332 | 0.1172 | 0.00199 | 502.2109 | 0.01699 | 58.8540 | 2798.58 | 47.5512 |
| 240 | 35.6328 | 0.0281 | 0.00043 | 2308.85 | 0.01543 | 64.7957 | 3870.69 | 59.7368 |
| 360 | 212.7038 | 0.0047 | 0.00007 | 14114 | 0.01507 | 66.3532 | 4310.72 | 64.9662 |
| 480 | 1269.70 | 0.0008 | 0.00001 | 84580 | 0.01501 | 66.6142 | 4415.74 | 66.2883 |

2% **TABLE 7** Discrete Cash Flow: Compound Interest Factors **2%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0200 | 0.9804 | 1.00000 | 1.0000 | 1.02000 | 0.9804 | | |
| 2 | 1.0404 | 0.9612 | 0.49505 | 2.0200 | 0.51505 | 1.9416 | 0.9612 | 0.4950 |
| 3 | 1.0612 | 0.9423 | 0.32675 | 3.0604 | 0.34675 | 2.8839 | 2.8458 | 0.9868 |
| 4 | 1.0824 | 0.9238 | 0.24262 | 4.1216 | 0.26262 | 3.8077 | 5.6173 | 1.4752 |
| 5 | 1.1041 | 0.9057 | 0.19216 | 5.2040 | 0.21216 | 4.7135 | 9.2403 | 1.9604 |
| 6 | 1.1262 | 0.8880 | 0.15853 | 6.3081 | 0.17853 | 5.6014 | 13.6801 | 2.4423 |
| 7 | 1.1487 | 0.8706 | 0.13451 | 7.4343 | 0.15451 | 6.4720 | 18.9035 | 2.9208 |
| 8 | 1.1717 | 0.8535 | 0.11651 | 8.5830 | 0.13651 | 7.3255 | 24.8779 | 3.3961 |
| 9 | 1.1951 | 0.8368 | 0.10252 | 9.7546 | 0.12252 | 8.1622 | 31.5720 | 3.8681 |
| 10 | 1.2190 | 0.8203 | 0.09133 | 10.9497 | 0.11133 | 8.9826 | 38.9551 | 4.3367 |
| 11 | 1.2434 | 0.8043 | 0.08218 | 12.1687 | 0.10218 | 9.7868 | 46.9977 | 4.8021 |
| 12 | 1.2682 | 0.7885 | 0.07456 | 13.4121 | 0.09456 | 10.5753 | 55.6712 | 5.2642 |
| 13 | 1.2936 | 0.7730 | 0.06812 | 14.6803 | 0.08812 | 11.3484 | 64.9475 | 5.7231 |
| 14 | 1.3195 | 0.7579 | 0.06260 | 15.9739 | 0.08260 | 12.1062 | 74.7999 | 6.1786 |
| 15 | 1.3459 | 0.7430 | 0.05783 | 17.2934 | 0.07783 | 12.8493 | 85.2021 | 6.6309 |
| 16 | 1.3728 | 0.7284 | 0.05365 | 18.6393 | 0.07365 | 13.5777 | 96.1288 | 7.0799 |
| 17 | 1.4002 | 0.7142 | 0.04997 | 20.0121 | 0.06997 | 14.2919 | 107.5554 | 7.5256 |
| 18 | 1.4282 | 0.7002 | 0.04670 | 21.4123 | 0.06670 | 14.9920 | 119.4581 | 7.9681 |
| 19 | 1.4568 | 0.6864 | 0.04378 | 22.8406 | 0.06378 | 15.6785 | 131.8139 | 8.4073 |
| 20 | 1.4859 | 0.6730 | 0.04116 | 24.2974 | 0.06116 | 16.3514 | 144.6003 | 8.8433 |
| 21 | 1.5157 | 0.6598 | 0.03878 | 25.7833 | 0.05878 | 17.0112 | 157.7959 | 9.2760 |
| 22 | 1.5460 | 0.6468 | 0.03663 | 27.2990 | 0.05663 | 17.6580 | 171.3795 | 9.7055 |
| 23 | 1.5769 | 0.6342 | 0.03467 | 28.8450 | 0.05467 | 18.2922 | 185.3309 | 10.1317 |
| 24 | 1.6084 | 0.6217 | 0.03287 | 30.4219 | 0.05287 | 18.9139 | 199.6305 | 10.5547 |
| 25 | 1.6406 | 0.6095 | 0.03122 | 32.0303 | 0.05122 | 19.5235 | 214.2592 | 10.9745 |
| 26 | 1.6734 | 0.5976 | 0.02970 | 33.6709 | 0.04970 | 20.1210 | 229.1987 | 11.3910 |
| 27 | 1.7069 | 0.5859 | 0.02829 | 35.3443 | 0.04829 | 20.7069 | 244.4311 | 11.8043 |
| 28 | 1.7410 | 0.5744 | 0.02699 | 37.0512 | 0.04699 | 21.2813 | 259.9392 | 12.2145 |
| 29 | 1.7758 | 0.5631 | 0.02578 | 38.7922 | 0.04578 | 21.8444 | 275.7064 | 12.6214 |
| 30 | 1.8114 | 0.5521 | 0.02465 | 40.5681 | 0.04465 | 22.3965 | 291.7164 | 13.0251 |
| 36 | 2.0399 | 0.4902 | 0.01923 | 51.9944 | 0.03923 | 25.4888 | 392.0405 | 15.3809 |
| 40 | 2.2080 | 0.4529 | 0.01656 | 60.4020 | 0.03656 | 27.3555 | 461.9931 | 16.8885 |
| 48 | 2.5871 | 0.3865 | 0.01260 | 79.3535 | 0.03260 | 30.6731 | 605.9657 | 19.7556 |
| 50 | 2.6916 | 0.3715 | 0.01182 | 84.5794 | 0.03182 | 31.4236 | 642.3606 | 20.4420 |
| 52 | 2.8003 | 0.3571 | 0.01111 | 90.0164 | 0.03111 | 32.1449 | 678.7849 | 21.1164 |
| 55 | 2.9717 | 0.3365 | 0.01014 | 98.5865 | 0.03014 | 33.1748 | 733.3527 | 22.1057 |
| 60 | 3.2810 | 0.3048 | 0.00877 | 114.0515 | 0.02877 | 34.7609 | 823.6975 | 23.6961 |
| 72 | 4.1611 | 0.2403 | 0.00633 | 158.0570 | 0.02633 | 37.9841 | 1034.06 | 27.2234 |
| 75 | 4.4158 | 0.2265 | 0.00586 | 170.7918 | 0.02586 | 38.6771 | 1084.64 | 28.0434 |
| 84 | 5.2773 | 0.1895 | 0.00468 | 213.8666 | 0.02468 | 40.5255 | 1230.42 | 30.3616 |
| 90 | 5.9431 | 0.1683 | 0.00405 | 247.1567 | 0.02405 | 41.5869 | 1322.17 | 31.7929 |
| 96 | 6.6929 | 0.1494 | 0.00351 | 284.6467 | 0.02351 | 42.5294 | 1409.30 | 33.1370 |
| 100 | 7.2446 | 0.1380 | 0.00320 | 312.2323 | 0.02320 | 43.0984 | 1464.75 | 33.9863 |
| 108 | 8.4883 | 0.1178 | 0.00267 | 374.4129 | 0.02267 | 44.1095 | 1569.30 | 35.5774 |
| 120 | 10.7652 | 0.0929 | 0.00205 | 488.2582 | 0.02205 | 45.3554 | 1710.42 | 37.7114 |
| 132 | 13.6528 | 0.0732 | 0.00158 | 632.6415 | 0.02158 | 46.3378 | 1833.47 | 39.5676 |
| 144 | 17.3151 | 0.0578 | 0.00123 | 815.7545 | 0.02123 | 47.1123 | 1939.79 | 41.1738 |
| 240 | 115.8887 | 0.0086 | 0.00017 | 5744.44 | 0.02017 | 49.5686 | 2374.88 | 47.9110 |
| 360 | 1247.56 | 0.0008 | 0.00002 | 62328 | 0.02002 | 49.9599 | 2482.57 | 49.7112 |
| 480 | 13430 | 0.0001 | | | 0.02000 | 49.9963 | 2498.03 | 49.9643 |

3%

TABLE 8 Discrete Cash Flow: Compound Interest Factors

3%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0300 | 0.9709 | 1.00000 | 1.0000 | 1.03000 | 0.9709 | | |
| 2 | 1.0609 | 0.9426 | 0.49261 | 2.0300 | 0.52261 | 1.9135 | 0.9426 | 0.4926 |
| 3 | 1.0927 | 0.9151 | 0.32353 | 3.0909 | 0.35353 | 2.8286 | 2.7729 | 0.9803 |
| 4 | 1.1255 | 0.8885 | 0.23903 | 4.1836 | 0.26903 | 3.7171 | 5.4383 | 1.4631 |
| 5 | 1.1593 | 0.8626 | 0.18835 | 5.3091 | 0.21835 | 4.5797 | 8.8888 | 1.9409 |
| 6 | 1.1941 | 0.8375 | 0.15460 | 6.4684 | 0.18460 | 5.4172 | 13.0762 | 2.4138 |
| 7 | 1.2299 | 0.8131 | 0.13051 | 7.6625 | 0.16051 | 6.2303 | 17.9547 | 2.8819 |
| 8 | 1.2668 | 0.7894 | 0.11246 | 8.8923 | 0.14246 | 7.0197 | 23.4806 | 3.3450 |
| 9 | 1.3048 | 0.7664 | 0.09843 | 10.1591 | 0.12843 | 7.7861 | 29.6119 | 3.8032 |
| 10 | 1.3439 | 0.7441 | 0.08723 | 11.4639 | 0.11723 | 8.5302 | 36.3088 | 4.2565 |
| 11 | 1.3842 | 0.7224 | 0.07808 | 12.8078 | 0.10808 | 9.2526 | 43.5330 | 4.7049 |
| 12 | 1.4258 | 0.7014 | 0.07046 | 14.1920 | 0.10046 | 9.9540 | 51.2482 | 5.1485 |
| 13 | 1.4685 | 0.6810 | 0.06403 | 15.6178 | 0.09403 | 10.6350 | 59.4196 | 5.5872 |
| 14 | 1.5126 | 0.6611 | 0.05853 | 17.0863 | 0.08853 | 11.2961 | 68.0141 | 6.0210 |
| 15 | 1.5580 | 0.6419 | 0.05377 | 18.5989 | 0.08377 | 11.9379 | 77.0002 | 6.4500 |
| 16 | 1.6047 | 0.6232 | 0.04961 | 20.1569 | 0.07961 | 12.5611 | 86.3477 | 6.8742 |
| 17 | 1.6528 | 0.6050 | 0.04595 | 21.7616 | 0.07595 | 13.1661 | 96.0280 | 7.2936 |
| 18 | 1.7024 | 0.5874 | 0.04271 | 23.4144 | 0.07271 | 13.7535 | 106.0137 | 7.7081 |
| 19 | 1.7535 | 0.5703 | 0.03981 | 25.1169 | 0.06981 | 14.3238 | 116.2788 | 8.1179 |
| 20 | 1.8061 | 0.5537 | 0.03722 | 26.8704 | 0.06722 | 14.8775 | 126.7987 | 8.5229 |
| 21 | 1.8603 | 0.5375 | 0.03487 | 28.6765 | 0.06487 | 15.4150 | 137.5496 | 8.9231 |
| 22 | 1.9161 | 0.5219 | 0.03275 | 30.5368 | 0.06275 | 15.9369 | 148.5094 | 9.3186 |
| 23 | 1.9736 | 0.5067 | 0.03081 | 32.4529 | 0.06081 | 16.4436 | 159.6566 | 9.7093 |
| 24 | 2.0328 | 0.4919 | 0.02905 | 34.4265 | 0.05905 | 16.9355 | 170.9711 | 10.0954 |
| 25 | 2.0938 | 0.4776 | 0.02743 | 36.4593 | 0.05743 | 17.4131 | 182.4336 | 10.4768 |
| 26 | 2.1566 | 0.4637 | 0.02594 | 38.5530 | 0.05594 | 17.8768 | 194.0260 | 10.8535 |
| 27 | 2.2213 | 0.4502 | 0.02456 | 40.7096 | 0.05456 | 18.3270 | 205.7309 | 11.2255 |
| 28 | 2.2879 | 0.4371 | 0.02329 | 42.9309 | 0.05329 | 18.7641 | 217.5320 | 11.5930 |
| 29 | 2.3566 | 0.4243 | 0.02211 | 45.2189 | 0.05211 | 19.1885 | 229.4137 | 11.9558 |
| 30 | 2.4273 | 0.4120 | 0.02102 | 47.5754 | 0.05102 | 19.6004 | 241.3613 | 12.3141 |
| 31 | 2.5001 | 0.4000 | 0.02000 | 50.0027 | 0.05000 | 20.0004 | 253.3609 | 12.6678 |
| 32 | 2.5751 | 0.3883 | 0.01905 | 52.5028 | 0.04905 | 20.3888 | 265.3993 | 13.0169 |
| 33 | 2.6523 | 0.3770 | 0.01816 | 55.0778 | 0.04816 | 20.7658 | 277.4642 | 13.3616 |
| 34 | 2.7319 | 0.3660 | 0.01732 | 57.7302 | 0.04732 | 21.1318 | 289.5437 | 13.7018 |
| 35 | 2.8139 | 0.3554 | 0.01654 | 60.4621 | 0.04654 | 21.4872 | 301.6267 | 14.0375 |
| 40 | 3.2620 | 0.3066 | 0.01326 | 75.4013 | 0.04326 | 23.1148 | 361.7499 | 15.6502 |
| 45 | 3.7816 | 0.2644 | 0.01079 | 92.7199 | 0.04079 | 24.5187 | 420.6325 | 17.1556 |
| 50 | 4.3839 | 0.2281 | 0.00887 | 112.7969 | 0.03887 | 25.7298 | 477.4803 | 18.5575 |
| 55 | 5.0821 | 0.1968 | 0.00735 | 136.0716 | 0.03735 | 26.7744 | 531.7411 | 19.8600 |
| 60 | 5.8916 | 0.1697 | 0.00613 | 163.0534 | 0.03613 | 27.6756 | 583.0526 | 21.0674 |
| 65 | 6.8300 | 0.1464 | 0.00515 | 194.3328 | 0.03515 | 28.4529 | 631.2010 | 22.1841 |
| 70 | 7.9178 | 0.1263 | 0.00434 | 230.5941 | 0.03434 | 29.1234 | 676.0869 | 23.2145 |
| 75 | 9.1789 | 0.1089 | 0.00367 | 272.6309 | 0.03367 | 29.7018 | 717.6978 | 24.1634 |
| 80 | 10.6409 | 0.0940 | 0.00311 | 321.3630 | 0.03311 | 30.2008 | 756.0865 | 25.0353 |
| 84 | 11.9764 | 0.0835 | 0.00273 | 365.8805 | 0.03273 | 30.5501 | 784.5434 | 25.6806 |
| 85 | 12.3357 | 0.0811 | 0.00265 | 377.8570 | 0.03265 | 30.6312 | 791.3529 | 25.8349 |
| 90 | 14.3005 | 0.0699 | 0.00226 | 443.3489 | 0.03226 | 31.0024 | 823.6302 | 26.5667 |
| 96 | 17.0755 | 0.0586 | 0.00187 | 535.8502 | 0.03187 | 31.3812 | 858.6377 | 27.3615 |
| 108 | 24.3456 | 0.0411 | 0.00129 | 778.1863 | 0.03129 | 31.9642 | 917.6013 | 28.7072 |
| 120 | 34.7110 | 0.0288 | 0.00089 | 1123.70 | 0.03089 | 32.3730 | 963.8635 | 29.7737 |

TABLE 9 Discrete Cash Flow: Compound Interest Factors

| 4% | TABLE 9 Discrete Cash Flow: Compound Interest Factors | | | | | | | 4% |
|-----|---|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0400 | 0.9615 | 1.00000 | 1.0000 | 1.04000 | 0.9615 | | |
| 2 | 1.0816 | 0.9246 | 0.49020 | 2.0400 | 0.53020 | 1.8861 | 0.9246 | 0.4902 |
| 3 | 1.1249 | 0.8890 | 0.32035 | 3.1216 | 0.36035 | 2.7751 | 2.7025 | 0.9739 |
| 4 | 1.1699 | 0.8548 | 0.23549 | 4.2465 | 0.27549 | 3.6299 | 5.2670 | 1.4510 |
| 5 | 1.2167 | 0.8219 | 0.18463 | 5.4163 | 0.22463 | 4.4518 | 8.5547 | 1.9216 |
| 6 | 1.2653 | 0.7903 | 0.15076 | 6.6330 | 0.19076 | 5.2421 | 12.5062 | 2.3857 |
| 7 | 1.3159 | 0.7599 | 0.12661 | 7.8983 | 0.16661 | 6.0021 | 17.0657 | 2.8433 |
| 8 | 1.3686 | 0.7307 | 0.10853 | 9.2142 | 0.14853 | 6.7327 | 22.1806 | 3.2944 |
| 9 | 1.4233 | 0.7026 | 0.09449 | 10.5828 | 0.13449 | 7.4353 | 27.8013 | 3.7391 |
| 10 | 1.4802 | 0.6756 | 0.08329 | 12.0061 | 0.12329 | 8.1109 | 33.8814 | 4.1773 |
| 11 | 1.5395 | 0.6496 | 0.07415 | 13.4864 | 0.11415 | 8.7605 | 40.3772 | 4.6090 |
| 12 | 1.6010 | 0.6246 | 0.06655 | 15.0258 | 0.10655 | 9.3851 | 47.2477 | 5.0343 |
| 13 | 1.6651 | 0.6006 | 0.06014 | 16.6268 | 0.10014 | 9.9856 | 54.4546 | 5.4533 |
| 14 | 1.7317 | 0.5775 | 0.05467 | 18.2919 | 0.09467 | 10.5631 | 61.9618 | 5.8659 |
| 15 | 1.8009 | 0.5553 | 0.04994 | 20.0236 | 0.08994 | 11.1184 | 69.7355 | 6.2721 |
| 16 | 1.8730 | 0.5339 | 0.04582 | 21.8245 | 0.08582 | 11.6523 | 77.7441 | 6.6720 |
| 17 | 1.9479 | 0.5134 | 0.04220 | 23.6975 | 0.08220 | 12.1657 | 85.9581 | 7.0656 |
| 18 | 2.0258 | 0.4936 | 0.03899 | 25.6454 | 0.07899 | 12.6593 | 94.3498 | 7.4530 |
| 19 | 2.1068 | 0.4746 | 0.03614 | 27.6712 | 0.07614 | 13.1339 | 102.8933 | 7.8342 |
| 20 | 2.1911 | 0.4564 | 0.03358 | 29.7781 | 0.07358 | 13.5903 | 111.5647 | 8.2091 |
| 21 | 2.2788 | 0.4388 | 0.03128 | 31.9692 | 0.07128 | 14.0292 | 120.3414 | 8.5779 |
| 22 | 2.3699 | 0.4220 | 0.02920 | 34.2480 | 0.06920 | 14.4511 | 129.2024 | 8.9407 |
| 23 | 2.4647 | 0.4057 | 0.02731 | 36.6179 | 0.06731 | 14.8568 | 138.1284 | 9.2973 |
| 24 | 2.5633 | 0.3901 | 0.02559 | 39.0826 | 0.06559 | 15.2470 | 147.1012 | 9.6479 |
| 25 | 2.6658 | 0.3751 | 0.02401 | 41.6459 | 0.06401 | 15.6221 | 156.1040 | 9.9925 |
| 26 | 2.7725 | 0.3607 | 0.02257 | 44.3117 | 0.06257 | 15.9828 | 165.1212 | 10.3312 |
| 27 | 2.8834 | 0.3468 | 0.02124 | 47.0842 | 0.06124 | 16.3296 | 174.1385 | 10.6640 |
| 28 | 2.9987 | 0.3335 | 0.02001 | 49.9676 | 0.06001 | 16.6631 | 183.1424 | 10.9909 |
| 29 | 3.1187 | 0.3207 | 0.01888 | 52.9663 | 0.05888 | 16.9837 | 192.1206 | 11.3120 |
| 30 | 3.2434 | 0.3083 | 0.01783 | 56.0849 | 0.05783 | 17.2920 | 201.0618 | 11.6274 |
| 31 | 3.3731 | 0.2965 | 0.01686 | 59.3283 | 0.05686 | 17.5885 | 209.9556 | 11.9371 |
| 32 | 3.5081 | 0.2851 | 0.01595 | 62.7015 | 0.05595 | 17.8736 | 218.7924 | 12.2411 |
| 33 | 3.6484 | 0.2741 | 0.01510 | 66.2095 | 0.05510 | 18.1476 | 227.5634 | 12.5396 |
| 34 | 3.7943 | 0.2636 | 0.01431 | 69.8579 | 0.05431 | 18.4112 | 236.2607 | 12.8324 |
| 35 | 3.9461 | 0.2534 | 0.01358 | 73.6522 | 0.05358 | 18.6646 | 244.8768 | 13.1198 |
| 40 | 4.8010 | 0.2083 | 0.01052 | 95.0255 | 0.05052 | 19.7928 | 286.5303 | 14.4765 |
| 45 | 5.8412 | 0.1712 | 0.00826 | 121.0294 | 0.04826 | 20.7200 | 325.4028 | 15.7047 |
| 50 | 7.1067 | 0.1407 | 0.00655 | 152.6671 | 0.04655 | 21.4822 | 361.1638 | 16.8122 |
| 55 | 8.6464 | 0.1157 | 0.00523 | 191.1592 | 0.04523 | 22.1086 | 393.6890 | 17.8070 |
| 60 | 10.5196 | 0.0951 | 0.00420 | 237.9907 | 0.04420 | 22.6235 | 422.9966 | 18.6972 |
| 65 | 12.7987 | 0.0781 | 0.00339 | 294.9684 | 0.04339 | 23.0467 | 449.2014 | 19.4909 |
| 70 | 15.5716 | 0.0642 | 0.00275 | 364.2905 | 0.04275 | 23.3945 | 472.4789 | 20.1961 |
| 75 | 18.9453 | 0.0528 | 0.00223 | 448.6314 | 0.04223 | 23.6804 | 493.0408 | 20.8206 |
| 80 | 23.0498 | 0.0434 | 0.00181 | 551.2450 | 0.04181 | 23.9154 | 511.1161 | 21.3718 |
| 85 | 28.0436 | 0.0357 | 0.00148 | 676.0901 | 0.04148 | 24.1085 | 526.9384 | 21.8569 |
| 90 | 34.1193 | 0.0293 | 0.00121 | 827.9833 | 0.04121 | 24.2673 | 540.7369 | 22.2826 |
| 96 | 43.1718 | 0.0232 | 0.00095 | 1054.30 | 0.04095 | 24.4209 | 554.9312 | 22.7236 |
| 108 | 69.1195 | 0.0145 | 0.00059 | 1702.99 | 0.04059 | 24.6383 | 576.8949 | 23.4146 |
| 120 | 110.6626 | 0.0090 | 0.00036 | 2741.56 | 0.04036 | 24.7741 | 592.2428 | 23.9057 |
| 144 | 283.6618 | 0.0035 | 0.00014 | 7066.55 | 0.04014 | 24.9119 | 610.1055 | 24.4906 |

5% TABLE 10 Discrete Cash Flow: Compound Interest Factors 5%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0500 | 0.9524 | 1.00000 | 1.0000 | 1.05000 | 0.9524 | | |
| 2 | 1.1025 | 0.9070 | 0.48780 | 2.0500 | 0.53780 | 1.8594 | 0.9070 | 0.4878 |
| 3 | 1.1576 | 0.8638 | 0.31721 | 3.1525 | 0.36721 | 2.7232 | 2.6347 | 0.9675 |
| 4 | 1.2155 | 0.8227 | 0.23201 | 4.3101 | 0.28201 | 3.5460 | 5.1028 | 1.4391 |
| 5 | 1.2763 | 0.7835 | 0.18097 | 5.5256 | 0.23097 | 4.3295 | 8.2369 | 1.9025 |
| 6 | 1.3401 | 0.7462 | 0.14702 | 6.8019 | 0.19702 | 5.0757 | 11.9680 | 2.3579 |
| 7 | 1.4071 | 0.7107 | 0.12282 | 8.1420 | 0.17282 | 5.7864 | 16.2321 | 2.8052 |
| 8 | 1.4775 | 0.6768 | 0.10472 | 9.5491 | 0.15472 | 6.4632 | 20.9700 | 3.2445 |
| 9 | 1.5513 | 0.6446 | 0.09069 | 11.0266 | 0.14069 | 7.1078 | 26.1268 | 3.6758 |
| 10 | 1.6289 | 0.6139 | 0.07950 | 12.5779 | 0.12950 | 7.7217 | 31.6520 | 4.0991 |
| 11 | 1.7103 | 0.5847 | 0.07039 | 14.2068 | 0.12039 | 8.3064 | 37.4988 | 4.5144 |
| 12 | 1.7959 | 0.5568 | 0.06283 | 15.9171 | 0.11283 | 8.8633 | 43.6241 | 4.9219 |
| 13 | 1.8856 | 0.5303 | 0.05646 | 17.7130 | 0.10646 | 9.3936 | 49.9879 | 5.3215 |
| 14 | 1.9799 | 0.5051 | 0.05102 | 19.5986 | 0.10102 | 9.8986 | 56.5538 | 5.7133 |
| 15 | 2.0789 | 0.4810 | 0.04634 | 21.5786 | 0.09634 | 10.3797 | 63.2880 | 6.0973 |
| 16 | 2.1829 | 0.4581 | 0.04227 | 23.6575 | 0.09227 | 10.8378 | 70.1597 | 6.4736 |
| 17 | 2.2920 | 0.4363 | 0.03870 | 25.8404 | 0.08870 | 11.2741 | 77.1405 | 6.8423 |
| 18 | 2.4066 | 0.4155 | 0.03555 | 28.1324 | 0.08555 | 11.6896 | 84.2043 | 7.2034 |
| 19 | 2.5270 | 0.3957 | 0.03275 | 30.5390 | 0.08275 | 12.0853 | 91.3275 | 7.5569 |
| 20 | 2.6533 | 0.3769 | 0.03024 | 33.0660 | 0.08024 | 12.4622 | 98.4884 | 7.9030 |
| 21 | 2.7860 | 0.3589 | 0.02800 | 35.7193 | 0.07800 | 12.8212 | 105.6673 | 8.2416 |
| 22 | 2.9253 | 0.3418 | 0.02597 | 38.5052 | 0.07597 | 13.1630 | 112.8461 | 8.5730 |
| 23 | 3.0715 | 0.3256 | 0.02414 | 41.4305 | 0.07414 | 13.4886 | 120.0087 | 8.8971 |
| 24 | 3.2251 | 0.3101 | 0.02247 | 44.5020 | 0.07247 | 13.7986 | 127.1402 | 9.2140 |
| 25 | 3.3864 | 0.2953 | 0.02095 | 47.7271 | 0.07095 | 14.0939 | 134.2275 | 9.5238 |
| 26 | 3.5557 | 0.2812 | 0.01956 | 51.1135 | 0.06956 | 14.3752 | 141.2585 | 9.8266 |
| 27 | 3.7335 | 0.2678 | 0.01829 | 54.6691 | 0.06829 | 14.6430 | 148.2226 | 10.1224 |
| 28 | 3.9201 | 0.2551 | 0.01712 | 58.4026 | 0.06712 | 14.8981 | 155.1101 | 10.4114 |
| 29 | 4.1161 | 0.2429 | 0.01605 | 62.3227 | 0.06605 | 15.1411 | 161.9126 | 10.6936 |
| 30 | 4.3219 | 0.2314 | 0.01505 | 66.4388 | 0.06505 | 15.3725 | 168.6226 | 10.9691 |
| 31 | 4.5380 | 0.2204 | 0.01413 | 70.7608 | 0.06413 | 15.5928 | 175.2333 | 11.2381 |
| 32 | 4.7649 | 0.2099 | 0.01328 | 75.2988 | 0.06328 | 15.8027 | 181.7392 | 11.5005 |
| 33 | 5.0032 | 0.1999 | 0.01249 | 80.0638 | 0.06249 | 16.0025 | 188.1351 | 11.7566 |
| 34 | 5.2533 | 0.1904 | 0.01176 | 85.0670 | 0.06176 | 16.1929 | 194.4168 | 12.0063 |
| 35 | 5.5160 | 0.1813 | 0.01107 | 90.3203 | 0.06107 | 16.3742 | 200.5807 | 12.2498 |
| 40 | 7.0400 | 0.1420 | 0.00828 | 120.7998 | 0.05828 | 17.1591 | 229.5452 | 13.3775 |
| 45 | 8.9850 | 0.1113 | 0.00626 | 159.7002 | 0.05626 | 17.7741 | 255.3145 | 14.3644 |
| 50 | 11.4674 | 0.0872 | 0.00478 | 209.3480 | 0.05478 | 18.2559 | 277.9148 | 15.2233 |
| 55 | 14.6356 | 0.0683 | 0.00367 | 272.7126 | 0.05367 | 18.6335 | 297.5104 | 15.9664 |
| 60 | 18.6792 | 0.0535 | 0.00283 | 353.5837 | 0.05283 | 18.9223 | 314.3432 | 16.6062 |
| 65 | 23.8399 | 0.0419 | 0.00219 | 456.7980 | 0.05219 | 19.1611 | 328.6910 | 17.1541 |
| 70 | 30.4264 | 0.0329 | 0.00170 | 588.5285 | 0.05170 | 19.3427 | 340.8409 | 17.6212 |
| 75 | 38.8327 | 0.0258 | 0.00132 | 756.6537 | 0.05132 | 19.4850 | 351.0721 | 18.0176 |
| 80 | 49.5614 | 0.0202 | 0.00103 | 971.2288 | 0.05103 | 19.5965 | 359.6460 | 18.3526 |
| 85 | 63.2544 | 0.0158 | 0.00080 | 1245.09 | 0.05080 | 19.6838 | 366.8007 | 18.6346 |
| 90 | 80.7304 | 0.0124 | 0.00063 | 1594.61 | 0.05063 | 19.7523 | 372.7488 | 18.8712 |
| 95 | 103.0347 | 0.0097 | 0.00049 | 2040.69 | 0.05049 | 19.8059 | 377.6774 | 19.0689 |
| 96 | 108.1864 | 0.0092 | 0.00047 | 2143.73 | 0.05047 | 19.8151 | 378.5555 | 19.1044 |
| 98 | 119.2755 | 0.0084 | 0.00042 | 2365.51 | 0.05042 | 19.8323 | 380.2139 | 19.1714 |
| 100 | 131.5013 | 0.0076 | 0.00038 | 2610.03 | 0.05038 | 19.8479 | 381.7492 | 19.2337 |

| 6% | TABLE 11 Discrete Cash Flow: Compound Interest Factors | | | | | | | 6% |
|-----|--|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0600 | 0.9434 | 1.00000 | 1.0000 | 1.06000 | 0.9434 | | |
| 2 | 1.1236 | 0.8900 | 0.48544 | 2.0600 | 0.54544 | 1.8334 | 0.8900 | 0.4854 |
| 3 | 1.1910 | 0.8396 | 0.31411 | 3.1836 | 0.37411 | 2.6730 | 2.5692 | 0.9612 |
| 4 | 1.2625 | 0.7921 | 0.22859 | 4.3746 | 0.28859 | 3.4651 | 4.9455 | 1.4272 |
| 5 | 1.3382 | 0.7473 | 0.17740 | 5.6371 | 0.23740 | 4.2124 | 7.9345 | 1.8836 |
| 6 | 1.4185 | 0.7050 | 0.14336 | 6.9753 | 0.20336 | 4.9173 | 11.4594 | 2.3304 |
| 7 | 1.5036 | 0.6651 | 0.11914 | 8.3938 | 0.17914 | 5.5824 | 15.4497 | 2.7676 |
| 8 | 1.5938 | 0.6274 | 0.10104 | 9.8975 | 0.16104 | 6.2098 | 19.8416 | 3.1952 |
| 9 | 1.6895 | 0.5919 | 0.08702 | 11.4913 | 0.14702 | 6.8017 | 24.5768 | 3.6133 |
| 10 | 1.7908 | 0.5584 | 0.07587 | 13.1808 | 0.13587 | 7.3601 | 29.6023 | 4.0220 |
| 11 | 1.8983 | 0.5268 | 0.06679 | 14.9716 | 0.12679 | 7.8869 | 34.8702 | 4.4213 |
| 12 | 2.0122 | 0.4970 | 0.05928 | 16.8699 | 0.11928 | 8.3838 | 40.3369 | 4.8113 |
| 13 | 2.1329 | 0.4688 | 0.05296 | 18.8821 | 0.11296 | 8.8527 | 45.9629 | 5.1920 |
| 14 | 2.2609 | 0.4423 | 0.04758 | 21.0151 | 0.10758 | 9.2950 | 51.7128 | 5.5635 |
| 15 | 2.3966 | 0.4173 | 0.04296 | 23.2760 | 0.10296 | 9.7122 | 57.5546 | 5.9260 |
| 16 | 2.5404 | 0.3936 | 0.03895 | 25.6725 | 0.09895 | 10.1059 | 63.4592 | 6.2794 |
| 17 | 2.6928 | 0.3714 | 0.03544 | 28.2129 | 0.09544 | 10.4773 | 69.4011 | 6.6240 |
| 18 | 2.8543 | 0.3503 | 0.03236 | 30.9057 | 0.09236 | 10.8276 | 75.3569 | 6.9597 |
| 19 | 3.0256 | 0.3305 | 0.02962 | 33.7600 | 0.08962 | 11.1581 | 81.3062 | 7.2867 |
| 20 | 3.2071 | 0.3118 | 0.02718 | 36.7856 | 0.08718 | 11.4699 | 87.2304 | 7.6051 |
| 21 | 3.3996 | 0.2942 | 0.02500 | 39.9927 | 0.08500 | 11.7641 | 93.1136 | 7.9151 |
| 22 | 3.6035 | 0.2775 | 0.02305 | 43.3923 | 0.08305 | 12.0416 | 98.9412 | 8.2166 |
| 23 | 3.8197 | 0.2618 | 0.02128 | 46.9958 | 0.08128 | 12.3034 | 104.7007 | 8.5099 |
| 24 | 4.0489 | 0.2470 | 0.01968 | 50.8156 | 0.07968 | 12.5504 | 110.3812 | 8.7951 |
| 25 | 4.2919 | 0.2330 | 0.01823 | 54.8645 | 0.07823 | 12.7834 | 115.9732 | 9.0722 |
| 26 | 4.5494 | 0.2198 | 0.01690 | 59.1564 | 0.07690 | 13.0032 | 121.4684 | 9.3414 |
| 27 | 4.8223 | 0.2074 | 0.01570 | 63.7058 | 0.07570 | 13.2105 | 126.8600 | 9.6029 |
| 28 | 5.1117 | 0.1956 | 0.01459 | 68.5281 | 0.07459 | 13.4062 | 132.1420 | 9.8568 |
| 29 | 5.4184 | 0.1846 | 0.01358 | 73.6398 | 0.07358 | 13.5907 | 137.3096 | 10.1032 |
| 30 | 5.7435 | 0.1741 | 0.01265 | 79.0582 | 0.07265 | 13.7648 | 142.3588 | 10.3422 |
| 31 | 6.0881 | 0.1643 | 0.01179 | 84.8017 | 0.07179 | 13.9291 | 147.2864 | 10.5740 |
| 32 | 6.4534 | 0.1550 | 0.01100 | 90.8898 | 0.07100 | 14.0840 | 152.0901 | 10.7988 |
| 33 | 6.8406 | 0.1462 | 0.01027 | 97.3432 | 0.07027 | 14.2302 | 156.7681 | 11.0166 |
| 34 | 7.2510 | 0.1379 | 0.00960 | 104.1838 | 0.06960 | 14.3681 | 161.3192 | 11.2276 |
| 35 | 7.6861 | 0.1301 | 0.00897 | 111.4348 | 0.06897 | 14.4982 | 165.7427 | 11.4319 |
| 40 | 10.2857 | 0.0972 | 0.00646 | 154.7620 | 0.06646 | 15.0463 | 185.9568 | 12.3590 |
| 45 | 13.7646 | 0.0727 | 0.00470 | 212.7435 | 0.06470 | 15.4558 | 203.1096 | 13.1413 |
| 50 | 18.4202 | 0.0543 | 0.00344 | 290.3359 | 0.06344 | 15.7619 | 217.4574 | 13.7964 |
| 55 | 24.6503 | 0.0406 | 0.00254 | 394.1720 | 0.06254 | 15.9905 | 229.3222 | 14.3411 |
| 60 | 32.9877 | 0.0303 | 0.00188 | 533.1282 | 0.06188 | 16.1614 | 239.0428 | 14.7909 |
| 65 | 44.1450 | 0.0227 | 0.00139 | 719.0829 | 0.06139 | 16.2891 | 246.9450 | 15.1601 |
| 70 | 59.0759 | 0.0169 | 0.00103 | 967.9322 | 0.06103 | 16.3845 | 253.3271 | 15.4613 |
| 75 | 79.0569 | 0.0126 | 0.00077 | 1300.95 | 0.06077 | 16.4558 | 258.4527 | 15.7058 |
| 80 | 105.7960 | 0.0095 | 0.00057 | 1746.60 | 0.06057 | 16.5091 | 262.5493 | 15.9033 |
| 85 | 141.5789 | 0.0071 | 0.00043 | 2342.98 | 0.06043 | 16.5489 | 265.8096 | 16.0620 |
| 90 | 189.4645 | 0.0053 | 0.00032 | 3141.08 | 0.06032 | 16.5787 | 268.3946 | 16.1891 |
| 95 | 253.5463 | 0.0039 | 0.00024 | 4209.10 | 0.06024 | 16.6009 | 270.4375 | 16.2905 |
| 96 | 268.7590 | 0.0037 | 0.00022 | 4462.65 | 0.06022 | 16.6047 | 270.7909 | 16.3081 |
| 98 | 301.9776 | 0.0033 | 0.00020 | 5016.29 | 0.06020 | 16.6115 | 271.4491 | 16.3411 |
| 100 | 339.3021 | 0.0029 | 0.00018 | 5638.37 | 0.06018 | 16.6175 | 272.0471 | 16.3711 |

7% TABLE 12 Discrete Cash Flow: Compound Interest Factors 7%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|-----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0700 | 0.9346 | 1.00000 | 1.0000 | 1.07000 | 0.9346 | | |
| 2 | 1.1449 | 0.8734 | 0.48309 | 2.0700 | 0.55309 | 1.8080 | 0.8734 | 0.4831 |
| 3 | 1.2250 | 0.8163 | 0.31105 | 3.2149 | 0.38105 | 2.6243 | 2.5060 | 0.9549 |
| 4 | 1.3108 | 0.7629 | 0.22523 | 4.4399 | 0.29523 | 3.3872 | 4.7947 | 1.4155 |
| 5 | 1.4026 | 0.7130 | 0.17389 | 5.7507 | 0.24389 | 4.1002 | 7.6467 | 1.8650 |
| 6 | 1.5007 | 0.6663 | 0.13980 | 7.1533 | 0.20980 | 4.7665 | 10.9784 | 2.3032 |
| 7 | 1.6058 | 0.6227 | 0.11555 | 8.6540 | 0.18555 | 5.3893 | 14.7149 | 2.7304 |
| 8 | 1.7182 | 0.5820 | 0.09747 | 10.2598 | 0.16747 | 5.9713 | 18.7889 | 3.1465 |
| 9 | 1.8385 | 0.5439 | 0.08349 | 11.9780 | 0.15349 | 6.5152 | 23.1404 | 3.5517 |
| 10 | 1.9672 | 0.5083 | 0.07238 | 13.8164 | 0.14238 | 7.0236 | 27.7156 | 3.9461 |
| 11 | 2.1049 | 0.4751 | 0.06336 | 15.7836 | 0.13336 | 7.4987 | 32.4665 | 4.3296 |
| 12 | 2.2522 | 0.4440 | 0.05590 | 17.8885 | 0.12590 | 7.9427 | 37.3506 | 4.7025 |
| 13 | 2.4098 | 0.4150 | 0.04965 | 20.1406 | 0.11965 | 8.3577 | 42.3302 | 5.0648 |
| 14 | 2.5785 | 0.3878 | 0.04434 | 22.5505 | 0.11434 | 8.7455 | 47.3718 | 5.4167 |
| 15 | 2.7590 | 0.3624 | 0.03979 | 25.1290 | 0.10979 | 9.1079 | 52.4461 | 5.7583 |
| 16 | 2.9522 | 0.3387 | 0.03586 | 27.8881 | 0.10586 | 9.4466 | 57.5271 | 6.0897 |
| 17 | 3.1588 | 0.3166 | 0.03243 | 30.8402 | 0.10243 | 9.7632 | 62.5923 | 6.4110 |
| 18 | 3.3799 | 0.2959 | 0.02941 | 33.9990 | 0.09941 | 10.0591 | 67.6219 | 6.7225 |
| 19 | 3.6165 | 0.2765 | 0.02675 | 37.3790 | 0.09675 | 10.3356 | 72.5991 | 7.0242 |
| 20 | 3.8697 | 0.2584 | 0.02439 | 40.9955 | 0.09439 | 10.5940 | 77.5091 | 7.3163 |
| 21 | 4.1406 | 0.2415 | 0.02229 | 44.8652 | 0.09229 | 10.8355 | 82.3393 | 7.5990 |
| 22 | 4.4304 | 0.2257 | 0.02041 | 49.0057 | 0.09041 | 11.0612 | 87.0793 | 7.8725 |
| 23 | 4.7405 | 0.2109 | 0.01871 | 53.4361 | 0.08871 | 11.2722 | 91.7201 | 8.1369 |
| 24 | 5.0724 | 0.1971 | 0.01719 | 58.1767 | 0.08719 | 11.4693 | 96.2545 | 8.3923 |
| 25 | 5.4274 | 0.1842 | 0.01581 | 63.2490 | 0.08581 | 11.6536 | 100.6765 | 8.6391 |
| 26 | 5.8074 | 0.1722 | 0.01456 | 68.6765 | 0.08456 | 11.8258 | 104.9814 | 8.8773 |
| 27 | 6.2139 | 0.1609 | 0.01343 | 74.4838 | 0.08343 | 11.9867 | 109.1656 | 9.1072 |
| 28 | 6.6488 | 0.1504 | 0.01239 | 80.6977 | 0.08239 | 12.1371 | 113.2264 | 9.3289 |
| 29 | 7.1143 | 0.1406 | 0.01145 | 87.3465 | 0.08145 | 12.2777 | 117.1622 | 9.5427 |
| 30 | 7.6123 | 0.1314 | 0.01059 | 94.4608 | 0.08059 | 12.4090 | 120.9718 | 9.7487 |
| 31 | 8.1451 | 0.1228 | 0.00980 | 102.0730 | 0.07980 | 12.5318 | 124.6550 | 9.9471 |
| 32 | 8.7153 | 0.1147 | 0.00907 | 110.2182 | 0.07907 | 12.6466 | 128.2120 | 10.1381 |
| 33 | 9.3253 | 0.1072 | 0.00841 | 118.9334 | 0.07841 | 12.7538 | 131.6435 | 10.3219 |
| 34 | 9.9781 | 0.1002 | 0.00780 | 128.2588 | 0.07780 | 12.8540 | 134.9507 | 10.4987 |
| 35 | 10.6766 | 0.0937 | 0.00723 | 138.2369 | 0.07723 | 12.9477 | 138.1353 | 10.6687 |
| 40 | 14.9745 | 0.0668 | 0.00501 | 199.6351 | 0.07501 | 13.3317 | 152.2928 | 11.4233 |
| 45 | 21.0025 | 0.0476 | 0.00350 | 285.7493 | 0.07350 | 13.6055 | 163.7559 | 12.0360 |
| 50 | 29.4570 | 0.0339 | 0.00246 | 406.5289 | 0.07246 | 13.8007 | 172.9051 | 12.5287 |
| 55 | 41.3150 | 0.0242 | 0.00174 | 575.9286 | 0.07174 | 13.9399 | 180.1243 | 12.9215 |
| 60 | 57.9464 | 0.0173 | 0.00123 | 813.5204 | 0.07123 | 14.0392 | 185.7677 | 13.2321 |
| 65 | 81.2729 | 0.0123 | 0.00087 | 1146.76 | 0.07087 | 14.1099 | 190.1452 | 13.4760 |
| 70 | 113.9894 | 0.0088 | 0.00062 | 1614.13 | 0.07062 | 14.1604 | 193.5185 | 13.6662 |
| 75 | 159.8760 | 0.0063 | 0.00044 | 2269.66 | 0.07044 | 14.1964 | 196.1035 | 13.8136 |
| 80 | 224.2344 | 0.0045 | 0.00031 | 3189.06 | 0.07031 | 14.2220 | 198.0748 | 13.9273 |
| 85 | 314.5003 | 0.0032 | 0.00022 | 4478.58 | 0.07022 | 14.2403 | 199.5717 | 14.0146 |
| 90 | 441.1030 | 0.0023 | 0.00016 | 6287.19 | 0.07016 | 14.2533 | 200.7042 | 14.0812 |
| 95 | 618.6697 | 0.0016 | 0.00011 | 8823.85 | 0.07011 | 14.2626 | 201.5581 | 14.1319 |
| 96 | 661.9766 | 0.0015 | 0.00011 | 9442.52 | 0.07011 | 14.2641 | 201.7016 | 14.1405 |
| 98 | 757.8970 | 0.0013 | 0.00009 | 10813 | 0.07009 | 14.2669 | 201.9651 | 14.1562 |
| 100 | 867.7163 | 0.0012 | 0.00008 | 12382 | 0.07008 | 14.2693 | 202.2001 | 14.1703 |

| 8% | TABLE 13 Discrete Cash Flow: Compound Interest Factors | | | | | | 8% | |
|-----|--|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.0800 | 0.9259 | 1.00000 | 1.0000 | 1.08000 | 0.9259 | | |
| 2 | 1.1664 | 0.8573 | 0.48077 | 2.0800 | 0.56077 | 1.7833 | 0.8573 | 0.4808 |
| 3 | 1.2597 | 0.7938 | 0.30803 | 3.2464 | 0.38803 | 2.5771 | 2.4450 | 0.9487 |
| 4 | 1.3605 | 0.7350 | 0.22192 | 4.5061 | 0.30192 | 3.3121 | 4.6501 | 1.4040 |
| 5 | 1.4693 | 0.6806 | 0.17046 | 5.8666 | 0.25046 | 3.9927 | 7.3724 | 1.8465 |
| 6 | 1.5869 | 0.6302 | 0.13632 | 7.3359 | 0.21632 | 4.6229 | 10.5233 | 2.2763 |
| 7 | 1.7138 | 0.5835 | 0.11207 | 8.9228 | 0.19207 | 5.2064 | 14.0242 | 2.6937 |
| 8 | 1.8509 | 0.5403 | 0.09401 | 10.6366 | 0.17401 | 5.7466 | 17.8061 | 3.0985 |
| 9 | 1.9990 | 0.5002 | 0.08008 | 12.4876 | 0.16008 | 6.2469 | 21.8081 | 3.4910 |
| 10 | 2.1589 | 0.4632 | 0.06903 | 14.4866 | 0.14903 | 6.7101 | 25.9768 | 3.8713 |
| 11 | 2.3316 | 0.4289 | 0.06008 | 16.6455 | 0.14008 | 7.1390 | 30.2657 | 4.2395 |
| 12 | 2.5182 | 0.3971 | 0.05270 | 18.9771 | 0.13270 | 7.5361 | 34.6339 | 4.5957 |
| 13 | 2.7196 | 0.3677 | 0.04652 | 21.4953 | 0.12652 | 7.9038 | 39.0463 | 4.9402 |
| 14 | 2.9372 | 0.3405 | 0.04130 | 24.2149 | 0.12130 | 8.2442 | 43.4723 | 5.2731 |
| 15 | 3.1722 | 0.3152 | 0.03683 | 27.1521 | 0.11683 | 8.5595 | 47.8857 | 5.5945 |
| 16 | 3.4259 | 0.2919 | 0.03298 | 30.3243 | 0.11298 | 8.8514 | 52.2640 | 5.9046 |
| 17 | 3.7000 | 0.2703 | 0.02963 | 33.7502 | 0.10963 | 9.1216 | 56.5883 | 6.2037 |
| 18 | 3.9960 | 0.2502 | 0.02670 | 37.4502 | 0.10670 | 9.3719 | 60.8426 | 6.4920 |
| 19 | 4.3157 | 0.2317 | 0.02413 | 41.4463 | 0.10413 | 9.6036 | 65.0134 | 6.7697 |
| 20 | 4.6610 | 0.2145 | 0.02185 | 45.7620 | 0.10185 | 9.8181 | 69.0898 | 7.0369 |
| 21 | 5.0338 | 0.1987 | 0.01983 | 50.4229 | 0.09983 | 10.0168 | 73.0629 | 7.2940 |
| 22 | 5.4365 | 0.1839 | 0.01803 | 55.4568 | 0.09803 | 10.2007 | 76.9257 | 7.5412 |
| 23 | 5.8715 | 0.1703 | 0.01642 | 60.8933 | 0.09642 | 10.3711 | 80.6726 | 7.7786 |
| 24 | 6.3412 | 0.1577 | 0.01498 | 66.7648 | 0.09498 | 10.5288 | 84.2997 | 8.0066 |
| 25 | 6.8485 | 0.1460 | 0.01368 | 73.1059 | 0.09368 | 10.6748 | 87.8041 | 8.2254 |
| 26 | 7.3964 | 0.1352 | 0.01251 | 79.9544 | 0.09251 | 10.8100 | 91.1842 | 8.4352 |
| 27 | 7.9881 | 0.1252 | 0.01145 | 87.3508 | 0.09145 | 10.9352 | 94.4390 | 8.6363 |
| 28 | 8.6271 | 0.1159 | 0.01049 | 95.3388 | 0.09049 | 11.0511 | 97.5687 | 8.8289 |
| 29 | 9.3173 | 0.1073 | 0.00962 | 103.9659 | 0.08962 | 11.1584 | 100.5738 | 9.0133 |
| 30 | 10.0627 | 0.0994 | 0.00883 | 113.2832 | 0.08883 | 11.2578 | 103.4558 | 9.1897 |
| 31 | 10.8677 | 0.0920 | 0.00811 | 123.3459 | 0.08811 | 11.3498 | 106.2163 | 9.3584 |
| 32 | 11.7371 | 0.0852 | 0.00745 | 134.2135 | 0.08745 | 11.4350 | 108.8575 | 9.5197 |
| 33 | 12.6760 | 0.0789 | 0.00685 | 145.9506 | 0.08685 | 11.5139 | 111.3819 | 9.6737 |
| 34 | 13.6901 | 0.0730 | 0.00630 | 158.6267 | 0.08630 | 11.5869 | 113.7924 | 9.8208 |
| 35 | 14.7853 | 0.0676 | 0.00580 | 172.3168 | 0.08580 | 11.6546 | 116.0920 | 9.9611 |
| 40 | 21.7245 | 0.0460 | 0.00386 | 259.0565 | 0.08386 | 11.9246 | 126.0422 | 10.5699 |
| 45 | 31.9204 | 0.0313 | 0.00259 | 386.5056 | 0.08259 | 12.1084 | 133.7331 | 11.0447 |
| 50 | 46.9016 | 0.0213 | 0.00174 | 573.7702 | 0.08174 | 12.2335 | 139.5928 | 11.4107 |
| 55 | 68.9139 | 0.0145 | 0.00118 | 848.9232 | 0.08118 | 12.3186 | 144.0065 | 11.6902 |
| 60 | 101.2571 | 0.0099 | 0.00080 | 1253.21 | 0.08080 | 12.3766 | 147.3000 | 11.9015 |
| 65 | 148.7798 | 0.0067 | 0.00054 | 1847.25 | 0.08054 | 12.4160 | 149.7387 | 12.0602 |
| 70 | 218.6064 | 0.0046 | 0.00037 | 2720.08 | 0.08037 | 12.4428 | 151.5326 | 12.1783 |
| 75 | 321.2045 | 0.0031 | 0.00025 | 4002.56 | 0.08025 | 12.4611 | 152.8448 | 12.2658 |
| 80 | 471.9548 | 0.0021 | 0.00017 | 5886.94 | 0.08017 | 12.4735 | 153.8001 | 12.3301 |
| 85 | 693.4565 | 0.0014 | 0.00012 | 8655.71 | 0.08012 | 12.4820 | 154.4925 | 12.3772 |
| 90 | 1018.92 | 0.0010 | 0.00008 | 12724 | 0.08008 | 12.4877 | 154.9925 | 12.4116 |
| 95 | 1497.12 | 0.0007 | 0.00005 | 18702 | 0.08005 | 12.4917 | 155.3524 | 12.4365 |
| 96 | 1616.89 | 0.0006 | 0.00005 | 20199 | 0.08005 | 12.4923 | 155.4112 | 12.4406 |
| 98 | 1885.94 | 0.0005 | 0.00004 | 23562 | 0.08004 | 12.4934 | 155.5176 | 12.4480 |
| 100 | 2199.76 | 0.0005 | 0.00004 | 27485 | 0.08004 | 12.4943 | 155.6107 | 12.4545 |

9% TABLE 14 Discrete Cash Flow: Compound Interest Factors 9%

| <i>n</i> | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----------|----------------------------------|--------------------------------|-------------------------------|----------------------------------|-----------------------------------|--------------------------------|---|--|
| | <i>F/P</i> Compound Amount | <i>P/F</i> Present Worth | <i>A/F</i> Sinking Fund | <i>F/A</i> Compound Amount | <i>A/P</i> Capital Recovery | <i>P/A</i> Present Worth | <i>P/G</i> Gradient Present Worth | <i>A/G</i> Gradient Uniform Series |
| 1 | 1.0900 | 0.9174 | 1.00000 | 1.0000 | 1.09000 | 0.9174 | | |
| 2 | 1.1881 | 0.8417 | 0.47847 | 2.0900 | 0.56847 | 1.7591 | 0.8417 | 0.4785 |
| 3 | 1.2950 | 0.7722 | 0.30505 | 3.2781 | 0.39505 | 2.5313 | 2.3860 | 0.9426 |
| 4 | 1.4116 | 0.7084 | 0.21867 | 4.5731 | 0.30867 | 3.2397 | 4.5113 | 1.3925 |
| 5 | 1.5386 | 0.6499 | 0.16709 | 5.9847 | 0.25709 | 3.8897 | 7.1110 | 1.8282 |
| 6 | 1.6771 | 0.5963 | 0.13292 | 7.5233 | 0.22292 | 4.4859 | 10.0924 | 2.2498 |
| 7 | 1.8280 | 0.5470 | 0.10869 | 9.2004 | 0.19869 | 5.0330 | 13.3746 | 2.6574 |
| 8 | 1.9926 | 0.5019 | 0.09067 | 11.0285 | 0.18067 | 5.5348 | 16.8877 | 3.0512 |
| 9 | 2.1719 | 0.4604 | 0.07680 | 13.0210 | 0.16680 | 5.9952 | 20.5711 | 3.4312 |
| 10 | 2.3674 | 0.4224 | 0.06582 | 15.1929 | 0.15582 | 6.4177 | 24.3728 | 3.7978 |
| 11 | 2.5804 | 0.3875 | 0.05695 | 17.5603 | 0.14695 | 6.8052 | 28.2481 | 4.1510 |
| 12 | 2.8127 | 0.3555 | 0.04965 | 20.1407 | 0.13965 | 7.1607 | 32.1590 | 4.4910 |
| 13 | 3.0658 | 0.3262 | 0.04357 | 22.9534 | 0.13357 | 7.4869 | 36.0731 | 4.8182 |
| 14 | 3.3417 | 0.2992 | 0.03843 | 26.0192 | 0.12843 | 7.7862 | 39.9633 | 5.1326 |
| 15 | 3.6425 | 0.2745 | 0.03406 | 29.3609 | 0.12406 | 8.0607 | 43.8069 | 5.4346 |
| 16 | 3.9703 | 0.2519 | 0.03030 | 33.0034 | 0.12030 | 8.3126 | 47.5849 | 5.7245 |
| 17 | 4.3276 | 0.2311 | 0.02705 | 36.9737 | 0.11705 | 8.5436 | 51.2821 | 6.0024 |
| 18 | 4.7171 | 0.2120 | 0.02421 | 41.3013 | 0.11421 | 8.7556 | 54.8860 | 6.2687 |
| 19 | 5.1417 | 0.1945 | 0.02173 | 46.0185 | 0.11173 | 8.9501 | 58.3868 | 6.5236 |
| 20 | 5.6044 | 0.1784 | 0.01955 | 51.1601 | 0.10955 | 9.1285 | 61.7770 | 6.7674 |
| 21 | 6.1088 | 0.1637 | 0.01762 | 56.7645 | 0.10762 | 9.2922 | 65.0509 | 7.0006 |
| 22 | 6.6586 | 0.1502 | 0.01590 | 62.8733 | 0.10590 | 9.4424 | 68.2048 | 7.2232 |
| 23 | 7.2579 | 0.1378 | 0.01438 | 69.5319 | 0.10438 | 9.5802 | 71.2359 | 7.4357 |
| 24 | 7.9111 | 0.1264 | 0.01302 | 76.7898 | 0.10302 | 9.7066 | 74.1433 | 7.6384 |
| 25 | 8.6231 | 0.1160 | 0.01181 | 84.7009 | 0.10181 | 9.8226 | 76.9265 | 7.8316 |
| 26 | 9.3992 | 0.1064 | 0.01072 | 93.3240 | 0.10072 | 9.9290 | 79.5863 | 8.0156 |
| 27 | 10.2451 | 0.0976 | 0.00973 | 102.7231 | 0.09973 | 10.0266 | 82.1241 | 8.1906 |
| 28 | 11.1671 | 0.0895 | 0.00885 | 112.9682 | 0.09885 | 10.1161 | 84.5419 | 8.3571 |
| 29 | 12.1722 | 0.0822 | 0.00806 | 124.1354 | 0.09806 | 10.1983 | 86.8422 | 8.5154 |
| 30 | 13.2677 | 0.0754 | 0.00734 | 136.3075 | 0.09734 | 10.2737 | 89.0280 | 8.6657 |
| 31 | 14.4618 | 0.0691 | 0.00669 | 149.5752 | 0.09669 | 10.3428 | 91.1024 | 8.8083 |
| 32 | 15.7633 | 0.0634 | 0.00610 | 164.0370 | 0.09610 | 10.4062 | 93.0690 | 8.9436 |
| 33 | 17.1820 | 0.0582 | 0.00556 | 179.8003 | 0.09556 | 10.4644 | 94.9314 | 9.0718 |
| 34 | 18.7284 | 0.0534 | 0.00508 | 196.9823 | 0.09508 | 10.5178 | 96.6935 | 9.1933 |
| 35 | 20.4140 | 0.0490 | 0.00464 | 215.7108 | 0.09464 | 10.5668 | 98.3590 | 9.3083 |
| 40 | 31.4094 | 0.0318 | 0.00296 | 337.8824 | 0.09296 | 10.7574 | 105.3762 | 9.7957 |
| 45 | 48.3273 | 0.0207 | 0.00190 | 525.8587 | 0.09190 | 10.8812 | 110.5561 | 10.1603 |
| 50 | 74.3575 | 0.0134 | 0.00123 | 815.0836 | 0.09123 | 10.9617 | 114.3251 | 10.4295 |
| 55 | 114.4083 | 0.0087 | 0.00079 | 1260.09 | 0.09079 | 11.0140 | 117.0362 | 10.6261 |
| 60 | 176.0313 | 0.0057 | 0.00051 | 1944.79 | 0.09051 | 11.0480 | 118.9683 | 10.7683 |
| 65 | 270.8460 | 0.0037 | 0.00033 | 2998.29 | 0.09033 | 11.0701 | 120.3344 | 10.8702 |
| 70 | 416.7301 | 0.0024 | 0.00022 | 4619.22 | 0.09022 | 11.0844 | 121.2942 | 10.9427 |
| 75 | 641.1909 | 0.0016 | 0.00014 | 7113.23 | 0.09014 | 11.0938 | 121.9646 | 10.9940 |
| 80 | 986.5517 | 0.0010 | 0.00009 | 10951 | 0.09009 | 11.0998 | 122.4306 | 11.0299 |
| 85 | 1517.93 | 0.0007 | 0.00006 | 16855 | 0.09006 | 11.1038 | 122.7533 | 11.0551 |
| 90 | 2335.53 | 0.0004 | 0.00004 | 25939 | 0.09004 | 11.1064 | 122.9758 | 11.0726 |
| 95 | 3593.50 | 0.0003 | 0.00003 | 39917 | 0.09003 | 11.1080 | 123.1287 | 11.0847 |
| 96 | 3916.91 | 0.0003 | 0.00002 | 43510 | 0.09002 | 11.1083 | 123.1529 | 11.0866 |
| 98 | 4653.68 | 0.0002 | 0.00002 | 51696 | 0.09002 | 11.1087 | 123.1963 | 11.0900 |
| 100 | 5529.04 | 0.0002 | 0.00002 | 61423 | 0.09002 | 11.1091 | 123.2335 | 11.0930 |

| 10% | TABLE 15 Discrete Cash Flow: Compound Interest Factors | | | | | | 10% | |
|-----|--|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1000 | 0.9091 | 1.00000 | 1.0000 | 1.10000 | 0.9091 | | |
| 2 | 1.2100 | 0.8264 | 0.47619 | 2.1000 | 0.57619 | 1.7355 | 0.8264 | 0.4762 |
| 3 | 1.3310 | 0.7513 | 0.30211 | 3.3100 | 0.40211 | 2.4869 | 2.3291 | 0.9366 |
| 4 | 1.4641 | 0.6830 | 0.21547 | 4.6410 | 0.31547 | 3.1699 | 4.3781 | 1.3812 |
| 5 | 1.6105 | 0.6209 | 0.16380 | 6.1051 | 0.26380 | 3.7908 | 6.8618 | 1.8101 |
| 6 | 1.7716 | 0.5645 | 0.12961 | 7.7156 | 0.22961 | 4.3553 | 9.6842 | 2.2236 |
| 7 | 1.9487 | 0.5132 | 0.10541 | 9.4872 | 0.20541 | 4.8684 | 12.7631 | 2.6216 |
| 8 | 2.1436 | 0.4665 | 0.08744 | 11.4359 | 0.18744 | 5.3349 | 16.0287 | 3.0045 |
| 9 | 2.3579 | 0.4241 | 0.07364 | 13.5795 | 0.17364 | 5.7590 | 19.4215 | 3.3724 |
| 10 | 2.5937 | 0.3855 | 0.06275 | 15.9374 | 0.16275 | 6.1446 | 22.8913 | 3.7255 |
| 11 | 2.8531 | 0.3505 | 0.05396 | 18.5312 | 0.15396 | 6.4951 | 26.3963 | 4.0641 |
| 12 | 3.1384 | 0.3186 | 0.04676 | 21.3843 | 0.14676 | 6.8137 | 29.9012 | 4.3884 |
| 13 | 3.4523 | 0.2897 | 0.04078 | 24.5227 | 0.14078 | 7.1034 | 33.3772 | 4.6988 |
| 14 | 3.7975 | 0.2633 | 0.03575 | 27.9750 | 0.13575 | 7.3667 | 36.8005 | 4.9955 |
| 15 | 4.1772 | 0.2394 | 0.03147 | 31.7725 | 0.13147 | 7.6061 | 40.1520 | 5.2789 |
| 16 | 4.5950 | 0.2176 | 0.02782 | 35.9497 | 0.12782 | 7.8237 | 43.4164 | 5.5493 |
| 17 | 5.0545 | 0.1978 | 0.02466 | 40.5447 | 0.12466 | 8.0216 | 46.5819 | 5.8071 |
| 18 | 5.5599 | 0.1799 | 0.02193 | 45.5992 | 0.12193 | 8.2014 | 49.6395 | 6.0526 |
| 19 | 6.1159 | 0.1635 | 0.01955 | 51.1591 | 0.11955 | 8.3649 | 52.5827 | 6.2861 |
| 20 | 6.7275 | 0.1486 | 0.01746 | 57.2750 | 0.11746 | 8.5136 | 55.4069 | 6.5081 |
| 21 | 7.4002 | 0.1351 | 0.01562 | 64.0025 | 0.11562 | 8.6487 | 58.1095 | 6.7189 |
| 22 | 8.1403 | 0.1228 | 0.01401 | 71.4027 | 0.11401 | 8.7715 | 60.6893 | 6.9189 |
| 23 | 8.9543 | 0.1117 | 0.01257 | 79.5430 | 0.11257 | 8.8832 | 63.1462 | 7.1085 |
| 24 | 9.8497 | 0.1015 | 0.01130 | 88.4973 | 0.11130 | 8.9847 | 65.4813 | 7.2881 |
| 25 | 10.8347 | 0.0923 | 0.01017 | 98.3471 | 0.11017 | 9.0770 | 67.6964 | 7.4580 |
| 26 | 11.9182 | 0.0839 | 0.00916 | 109.1818 | 0.10916 | 9.1609 | 69.7940 | 7.6186 |
| 27 | 13.1100 | 0.0763 | 0.00826 | 121.0999 | 0.10826 | 9.2372 | 71.7773 | 7.7704 |
| 28 | 14.4210 | 0.0693 | 0.00745 | 134.2099 | 0.10745 | 9.3066 | 73.6495 | 7.9137 |
| 29 | 15.8631 | 0.0630 | 0.00673 | 148.6309 | 0.10673 | 9.3696 | 75.4146 | 8.0489 |
| 30 | 17.4494 | 0.0573 | 0.00608 | 164.4940 | 0.10608 | 9.4269 | 77.0766 | 8.1762 |
| 31 | 19.1943 | 0.0521 | 0.00550 | 181.9434 | 0.10550 | 9.4790 | 78.6395 | 8.2962 |
| 32 | 21.1138 | 0.0474 | 0.00497 | 201.1378 | 0.10497 | 9.5264 | 80.1078 | 8.4091 |
| 33 | 23.2252 | 0.0431 | 0.00450 | 222.2515 | 0.10450 | 9.5694 | 81.4856 | 8.5152 |
| 34 | 25.5477 | 0.0391 | 0.00407 | 245.4767 | 0.10407 | 9.6086 | 82.7773 | 8.6149 |
| 35 | 28.1024 | 0.0356 | 0.00369 | 271.0244 | 0.10369 | 9.6442 | 83.9872 | 8.7086 |
| 40 | 45.2593 | 0.0221 | 0.00226 | 442.5926 | 0.10226 | 9.7791 | 88.9525 | 9.0962 |
| 45 | 72.8905 | 0.0137 | 0.00139 | 718.9048 | 0.10139 | 9.8628 | 92.4544 | 9.3740 |
| 50 | 117.3909 | 0.0085 | 0.00086 | 1163.91 | 0.10086 | 9.9148 | 94.8889 | 9.5704 |
| 55 | 189.0591 | 0.0053 | 0.00053 | 1880.59 | 0.10053 | 9.9471 | 96.5619 | 9.7075 |
| 60 | 304.4816 | 0.0033 | 0.00033 | 3034.82 | 0.10033 | 9.9672 | 97.7010 | 9.8023 |
| 65 | 490.3707 | 0.0020 | 0.00020 | 4893.71 | 0.10020 | 9.9796 | 98.4705 | 9.8672 |
| 70 | 789.7470 | 0.0013 | 0.00013 | 7887.47 | 0.10013 | 9.9873 | 98.9870 | 9.9113 |
| 75 | 1271.90 | 0.0008 | 0.00008 | 12709 | 0.10008 | 9.9921 | 99.3317 | 9.9410 |
| 80 | 2048.40 | 0.0005 | 0.00005 | 20474 | 0.10005 | 9.9951 | 99.5606 | 9.9609 |
| 85 | 3298.97 | 0.0003 | 0.00003 | 32980 | 0.10003 | 9.9970 | 99.7120 | 9.9742 |
| 90 | 5313.02 | 0.0002 | 0.00002 | 53120 | 0.10002 | 9.9981 | 99.8118 | 9.9831 |
| 95 | 8556.68 | 0.0001 | 0.00001 | 85557 | 0.10001 | 9.9988 | 99.8773 | 9.9889 |
| 96 | 9412.34 | 0.0001 | 0.00001 | 94113 | 0.10001 | 9.9989 | 99.8874 | 9.9898 |
| 98 | 11389 | 0.0001 | 0.00001 | | 0.10001 | 9.9991 | 99.9052 | 9.9914 |
| 100 | 13781 | 0.0001 | 0.00001 | | 0.10001 | 9.9993 | 99.9202 | 9.9927 |

11% **TABLE 16** Discrete Cash Flow: Compound Interest Factors **11%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1100 | 0.9009 | 1.00000 | 1.0000 | 1.11000 | 0.9009 | | |
| 2 | 1.2321 | 0.8116 | 0.47393 | 2.1100 | 0.58393 | 1.7125 | 0.8116 | 0.4739 |
| 3 | 1.3676 | 0.7312 | 0.29921 | 3.3421 | 0.40921 | 2.4437 | 2.2740 | 0.9306 |
| 4 | 1.5181 | 0.6587 | 0.21233 | 4.7097 | 0.32233 | 3.1024 | 4.2502 | 1.3700 |
| 5 | 1.6851 | 0.5935 | 0.16057 | 6.2278 | 0.27057 | 3.6959 | 6.6240 | 1.7923 |
| 6 | 1.8704 | 0.5346 | 0.12638 | 7.9129 | 0.23638 | 4.2305 | 9.2972 | 2.1976 |
| 7 | 2.0762 | 0.4817 | 0.10222 | 9.7833 | 0.21222 | 4.7122 | 12.1872 | 2.5863 |
| 8 | 2.3045 | 0.4339 | 0.08432 | 11.8594 | 0.19432 | 5.1461 | 15.2246 | 2.9585 |
| 9 | 2.5580 | 0.3909 | 0.07060 | 14.1640 | 0.18060 | 5.5370 | 18.3520 | 3.3144 |
| 10 | 2.8394 | 0.3522 | 0.05980 | 16.7220 | 0.16980 | 5.8892 | 21.5217 | 3.6544 |
| 11 | 3.1518 | 0.3173 | 0.05112 | 19.5614 | 0.16112 | 6.2065 | 24.6945 | 3.9788 |
| 12 | 3.4985 | 0.2858 | 0.04403 | 22.7132 | 0.15403 | 6.4924 | 27.8388 | 4.2879 |
| 13 | 3.8833 | 0.2575 | 0.03815 | 26.2116 | 0.14815 | 6.7499 | 30.9290 | 4.5822 |
| 14 | 4.3104 | 0.2320 | 0.03323 | 30.0949 | 0.14323 | 6.9819 | 33.9449 | 4.8619 |
| 15 | 4.7846 | 0.2090 | 0.02907 | 34.4054 | 0.13907 | 7.1909 | 36.8709 | 5.1275 |
| 16 | 5.3109 | 0.1883 | 0.02552 | 39.1899 | 0.13552 | 7.3792 | 39.6953 | 5.3794 |
| 17 | 5.8951 | 0.1696 | 0.02247 | 44.5008 | 0.13247 | 7.5488 | 42.4095 | 5.6180 |
| 18 | 6.5436 | 0.1528 | 0.01984 | 50.3959 | 0.12984 | 7.7016 | 45.0074 | 5.8439 |
| 19 | 7.2633 | 0.1377 | 0.01756 | 56.9395 | 0.12756 | 7.8393 | 47.4856 | 6.0574 |
| 20 | 8.0623 | 0.1240 | 0.01558 | 64.2028 | 0.12558 | 7.9633 | 49.8423 | 6.2590 |
| 21 | 8.9492 | 0.1117 | 0.01384 | 72.2651 | 0.12384 | 8.0751 | 52.0771 | 6.4491 |
| 22 | 9.9336 | 0.1007 | 0.01231 | 81.2143 | 0.12231 | 8.1757 | 54.1912 | 6.6283 |
| 23 | 11.0263 | 0.0907 | 0.01097 | 91.1479 | 0.12097 | 8.2664 | 56.1864 | 6.7969 |
| 24 | 12.2392 | 0.0817 | 0.00979 | 102.1742 | 0.11979 | 8.3481 | 58.0656 | 6.9555 |
| 25 | 13.5855 | 0.0736 | 0.00874 | 114.4133 | 0.11874 | 8.4217 | 59.8322 | 7.1045 |
| 26 | 15.0799 | 0.0663 | 0.00781 | 127.9988 | 0.11781 | 8.4881 | 61.4900 | 7.2443 |
| 27 | 16.7386 | 0.0597 | 0.00699 | 143.0786 | 0.11699 | 8.5478 | 63.0433 | 7.3754 |
| 28 | 18.5799 | 0.0538 | 0.00626 | 159.8173 | 0.11626 | 8.6016 | 64.4965 | 7.4982 |
| 29 | 20.6237 | 0.0485 | 0.00561 | 178.3972 | 0.11561 | 8.6501 | 65.8542 | 7.6131 |
| 30 | 22.8923 | 0.0437 | 0.00502 | 199.0209 | 0.11502 | 8.6938 | 67.1210 | 7.7206 |
| 31 | 25.4104 | 0.0394 | 0.00451 | 221.9132 | 0.11451 | 8.7331 | 68.3016 | 7.8210 |
| 32 | 28.2056 | 0.0355 | 0.00404 | 247.3236 | 0.11404 | 8.7686 | 69.4007 | 7.9147 |
| 33 | 31.3082 | 0.0319 | 0.00363 | 275.5292 | 0.11363 | 8.8005 | 70.4228 | 8.0021 |
| 34 | 34.7521 | 0.0288 | 0.00326 | 306.8374 | 0.11326 | 8.8293 | 71.3724 | 8.0836 |
| 35 | 38.5749 | 0.0259 | 0.00293 | 341.5896 | 0.11293 | 8.8552 | 72.2538 | 8.1594 |
| 40 | 65.0009 | 0.0154 | 0.00172 | 581.8261 | 0.11172 | 8.9511 | 75.7789 | 8.4659 |
| 45 | 109.5302 | 0.0091 | 0.00101 | 986.6386 | 0.11101 | 9.0079 | 78.1551 | 8.6763 |
| 50 | 184.5648 | 0.0054 | 0.00060 | 1668.77 | 0.11060 | 9.0417 | 79.7341 | 8.8185 |
| 55 | 311.0025 | 0.0032 | 0.00035 | 2818.20 | 0.11035 | 9.0617 | 80.7712 | 8.9135 |
| 60 | 524.0572 | 0.0019 | 0.00021 | 4755.07 | 0.11021 | 9.0736 | 81.4461 | 8.9762 |
| 65 | 883.0669 | 0.0011 | 0.00012 | 8018.79 | 0.11012 | 9.0806 | 81.8819 | 9.0172 |
| 70 | 1488.02 | 0.0007 | 0.00007 | 13518 | 0.11007 | 9.0848 | 82.1614 | 9.0438 |
| 75 | 2507.40 | 0.0004 | 0.00004 | 22785 | 0.11004 | 9.0873 | 82.3397 | 9.0610 |
| 80 | 4225.11 | 0.0002 | 0.00003 | 38401 | 0.11003 | 9.0888 | 82.4529 | 9.0720 |
| 85 | 7119.56 | 0.0001 | 0.00002 | 64714 | 0.11002 | 9.0896 | 82.5245 | 9.0790 |

12% **TABLE 17** **Discrete Cash Flow: Compound Interest Factors** **12%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1200 | 0.8929 | 1.00000 | 1.0000 | 1.12000 | 0.8929 | | |
| 2 | 1.2544 | 0.7972 | 0.47170 | 2.1200 | 0.59170 | 1.6901 | 0.7972 | 0.4717 |
| 3 | 1.4049 | 0.7118 | 0.29635 | 3.3744 | 0.41635 | 2.4018 | 2.2208 | 0.9246 |
| 4 | 1.5735 | 0.6355 | 0.20923 | 4.7793 | 0.32923 | 3.0373 | 4.1273 | 1.3589 |
| 5 | 1.7623 | 0.5674 | 0.15741 | 6.3528 | 0.27741 | 3.6048 | 6.3970 | 1.7746 |
| 6 | 1.9738 | 0.5066 | 0.12323 | 8.1152 | 0.24323 | 4.1114 | 8.9302 | 2.1720 |
| 7 | 2.2107 | 0.4523 | 0.09912 | 10.0890 | 0.21912 | 4.5638 | 11.6443 | 2.5512 |
| 8 | 2.4760 | 0.4039 | 0.08130 | 12.2997 | 0.20130 | 4.9676 | 14.4714 | 2.9131 |
| 9 | 2.7731 | 0.3606 | 0.06768 | 14.7757 | 0.18768 | 5.3282 | 17.3563 | 3.2574 |
| 10 | 3.1058 | 0.3220 | 0.05698 | 17.5487 | 0.17698 | 5.6502 | 20.2541 | 3.5847 |
| 11 | 3.4785 | 0.2875 | 0.04842 | 20.6546 | 0.16842 | 5.9377 | 23.1288 | 3.8953 |
| 12 | 3.8960 | 0.2567 | 0.04144 | 24.1331 | 0.16144 | 6.1944 | 25.9523 | 4.1897 |
| 13 | 4.3635 | 0.2292 | 0.03568 | 28.0291 | 0.15568 | 6.4235 | 28.7024 | 4.4683 |
| 14 | 4.8871 | 0.2046 | 0.03087 | 32.3926 | 0.15087 | 6.6282 | 31.3624 | 4.7317 |
| 15 | 5.4736 | 0.1827 | 0.02682 | 37.2797 | 0.14682 | 6.8109 | 33.9202 | 4.9803 |
| 16 | 6.1304 | 0.1631 | 0.02339 | 42.7533 | 0.14339 | 6.9740 | 36.3670 | 5.2147 |
| 17 | 6.8660 | 0.1456 | 0.02046 | 48.8837 | 0.14046 | 7.1196 | 38.6973 | 5.4353 |
| 18 | 7.6900 | 0.1300 | 0.01794 | 55.7497 | 0.13794 | 7.2497 | 40.9080 | 5.6427 |
| 19 | 8.6128 | 0.1161 | 0.01576 | 63.4397 | 0.13576 | 7.3658 | 42.9979 | 5.8375 |
| 20 | 9.6463 | 0.1037 | 0.01388 | 72.0524 | 0.13388 | 7.4694 | 44.9676 | 6.0202 |
| 21 | 10.8038 | 0.0926 | 0.01224 | 81.6987 | 0.13224 | 7.5620 | 46.8188 | 6.1913 |
| 22 | 12.1003 | 0.0826 | 0.01081 | 92.5026 | 0.13081 | 7.6446 | 48.5543 | 6.3514 |
| 23 | 13.5523 | 0.0738 | 0.00956 | 104.6029 | 0.12956 | 7.7184 | 50.1776 | 6.5010 |
| 24 | 15.1786 | 0.0659 | 0.00846 | 118.1552 | 0.12846 | 7.7843 | 51.6929 | 6.6406 |
| 25 | 17.0001 | 0.0588 | 0.00750 | 133.3339 | 0.12750 | 7.8431 | 53.1046 | 6.7708 |
| 26 | 19.0401 | 0.0525 | 0.00665 | 150.3339 | 0.12665 | 7.8957 | 54.4177 | 6.8921 |
| 27 | 21.3249 | 0.0469 | 0.00590 | 169.3740 | 0.12590 | 7.9426 | 55.6369 | 7.0049 |
| 28 | 23.8839 | 0.0419 | 0.00524 | 190.6989 | 0.12524 | 7.9844 | 56.7674 | 7.1098 |
| 29 | 26.7499 | 0.0374 | 0.00466 | 214.5828 | 0.12466 | 8.0218 | 57.8141 | 7.2071 |
| 30 | 29.9599 | 0.0334 | 0.00414 | 241.3327 | 0.12414 | 8.0552 | 58.7821 | 7.2974 |
| 31 | 33.5551 | 0.0298 | 0.00369 | 271.2926 | 0.12369 | 8.0850 | 59.6761 | 7.3811 |
| 32 | 37.5817 | 0.0266 | 0.00328 | 304.8477 | 0.12328 | 8.1116 | 60.5010 | 7.4586 |
| 33 | 42.0915 | 0.0238 | 0.00292 | 342.4294 | 0.12292 | 8.1354 | 61.2612 | 7.5302 |
| 34 | 47.1425 | 0.0212 | 0.00260 | 384.5210 | 0.12260 | 8.1566 | 61.9612 | 7.5965 |
| 35 | 52.7996 | 0.0189 | 0.00232 | 431.6635 | 0.12232 | 8.1755 | 62.6052 | 7.6577 |
| 40 | 93.0510 | 0.0107 | 0.00130 | 767.0914 | 0.12130 | 8.2438 | 65.1159 | 7.8988 |
| 45 | 163.9876 | 0.0061 | 0.00074 | 1358.23 | 0.12074 | 8.2825 | 66.7342 | 8.0572 |
| 50 | 289.0022 | 0.0035 | 0.00042 | 2400.02 | 0.12042 | 8.3045 | 67.7624 | 8.1597 |
| 55 | 509.3206 | 0.0020 | 0.00024 | 4236.01 | 0.12024 | 8.3170 | 68.4082 | 8.2251 |
| 60 | 897.5969 | 0.0011 | 0.00013 | 7471.64 | 0.12013 | 8.3240 | 68.8100 | 8.2664 |
| 65 | 1581.87 | 0.0006 | 0.00008 | 13174 | 0.12008 | 8.3281 | 69.0581 | 8.2922 |
| 70 | 2787.80 | 0.0004 | 0.00004 | 23223 | 0.12004 | 8.3303 | 69.2103 | 8.3082 |
| 75 | 4913.06 | 0.0002 | 0.00002 | 40934 | 0.12002 | 8.3316 | 69.3031 | 8.3181 |
| 80 | 8658.48 | 0.0001 | 0.00001 | 72146 | 0.12001 | 8.3324 | 69.3594 | 8.3241 |
| 85 | 15259 | 0.0001 | 0.00001 | | 0.12001 | 8.3328 | 69.3935 | 8.3278 |

14% **TABLE 18** Discrete Cash Flow: Compound Interest Factors **14%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1400 | 0.8772 | 1.00000 | 1.0000 | 1.14000 | 0.8772 | | |
| 2 | 1.2996 | 0.7695 | 0.46729 | 2.1400 | 0.60729 | 1.6467 | 0.7695 | 0.4673 |
| 3 | 1.4815 | 0.6750 | 0.29073 | 3.4396 | 0.43073 | 2.3216 | 2.1194 | 0.9129 |
| 4 | 1.6890 | 0.5921 | 0.20320 | 4.9211 | 0.34320 | 2.9137 | 3.8957 | 1.3370 |
| 5 | 1.9254 | 0.5194 | 0.15128 | 6.6101 | 0.29128 | 3.4331 | 5.9731 | 1.7399 |
| 6 | 2.1950 | 0.4556 | 0.11716 | 8.5355 | 0.25716 | 3.8887 | 8.2511 | 2.1218 |
| 7 | 2.5023 | 0.3996 | 0.09319 | 10.7305 | 0.23319 | 4.2883 | 10.6489 | 2.4832 |
| 8 | 2.8526 | 0.3506 | 0.07557 | 13.2328 | 0.21557 | 4.6389 | 13.1028 | 2.8246 |
| 9 | 3.2519 | 0.3075 | 0.06217 | 16.0853 | 0.20217 | 4.9464 | 15.5629 | 3.1463 |
| 10 | 3.7072 | 0.2697 | 0.05171 | 19.3373 | 0.19171 | 5.2161 | 17.9906 | 3.4490 |
| 11 | 4.2262 | 0.2366 | 0.04339 | 23.0445 | 0.18339 | 5.4527 | 20.3567 | 3.7333 |
| 12 | 4.8179 | 0.2076 | 0.03667 | 27.2707 | 0.17667 | 5.6603 | 22.6399 | 3.9998 |
| 13 | 5.4924 | 0.1821 | 0.03116 | 32.0887 | 0.17116 | 5.8424 | 24.8247 | 4.2491 |
| 14 | 6.2613 | 0.1597 | 0.02661 | 37.5811 | 0.16661 | 6.0021 | 26.9009 | 4.4819 |
| 15 | 7.1379 | 0.1401 | 0.02281 | 43.8424 | 0.16281 | 6.1422 | 28.8623 | 4.6990 |
| 16 | 8.1372 | 0.1229 | 0.01962 | 50.9804 | 0.15962 | 6.2651 | 30.7057 | 4.9011 |
| 17 | 9.2765 | 0.1078 | 0.01692 | 59.1176 | 0.15692 | 6.3729 | 32.4305 | 5.0888 |
| 18 | 10.5752 | 0.0946 | 0.01462 | 68.3941 | 0.15462 | 6.4674 | 34.0380 | 5.2630 |
| 19 | 12.0557 | 0.0829 | 0.01266 | 78.9692 | 0.15266 | 6.5504 | 35.5311 | 5.4243 |
| 20 | 13.7435 | 0.0728 | 0.01099 | 91.0249 | 0.15099 | 6.6231 | 36.9135 | 5.5734 |
| 21 | 15.6676 | 0.0638 | 0.00954 | 104.7684 | 0.14954 | 6.6870 | 38.1901 | 5.7111 |
| 22 | 17.8610 | 0.0560 | 0.00830 | 120.4360 | 0.14830 | 6.7429 | 39.3658 | 5.8381 |
| 23 | 20.3616 | 0.0491 | 0.00723 | 138.2970 | 0.14723 | 6.7921 | 40.4463 | 5.9549 |
| 24 | 23.2122 | 0.0431 | 0.00630 | 158.6586 | 0.14630 | 6.8351 | 41.4371 | 6.0624 |
| 25 | 26.4619 | 0.0378 | 0.00550 | 181.8708 | 0.14550 | 6.8729 | 42.3441 | 6.1610 |
| 26 | 30.1666 | 0.0331 | 0.00480 | 208.3327 | 0.14480 | 6.9061 | 43.1728 | 6.2514 |
| 27 | 34.3899 | 0.0291 | 0.00419 | 238.4993 | 0.14419 | 6.9352 | 43.9289 | 6.3342 |
| 28 | 39.2045 | 0.0255 | 0.00366 | 272.8892 | 0.14366 | 6.9607 | 44.6176 | 6.4100 |
| 29 | 44.6931 | 0.0224 | 0.00320 | 312.0937 | 0.14320 | 6.9830 | 45.2441 | 6.4791 |
| 30 | 50.9502 | 0.0196 | 0.00280 | 356.7868 | 0.14280 | 7.0027 | 45.8132 | 6.5423 |
| 31 | 58.0832 | 0.0172 | 0.00245 | 407.7370 | 0.14245 | 7.0199 | 46.3297 | 6.5998 |
| 32 | 66.2148 | 0.0151 | 0.00215 | 465.8202 | 0.14215 | 7.0350 | 46.7979 | 6.6522 |
| 33 | 75.4849 | 0.0132 | 0.00188 | 532.0350 | 0.14188 | 7.0482 | 47.2218 | 6.6998 |
| 34 | 86.0528 | 0.0116 | 0.00165 | 607.5199 | 0.14165 | 7.0599 | 47.6053 | 6.7431 |
| 35 | 98.1002 | 0.0102 | 0.00144 | 693.5727 | 0.14144 | 7.0700 | 47.9519 | 6.7824 |
| 40 | 188.8835 | 0.0053 | 0.00075 | 1342.03 | 0.14075 | 7.1050 | 49.2376 | 6.9300 |
| 45 | 363.6791 | 0.0027 | 0.00039 | 2590.56 | 0.14039 | 7.1232 | 49.9963 | 7.0188 |
| 50 | 700.2330 | 0.0014 | 0.00020 | 4994.52 | 0.14020 | 7.1327 | 50.4375 | 7.0714 |
| 55 | 1348.24 | 0.0007 | 0.00010 | 9623.13 | 0.14010 | 7.1376 | 50.6912 | 7.1020 |
| 60 | 2595.92 | 0.0004 | 0.00005 | 18535 | 0.14005 | 7.1401 | 50.8357 | 7.1197 |
| 65 | 4998.22 | 0.0002 | 0.00003 | 35694 | 0.14003 | 7.1414 | 50.9173 | 7.1298 |
| 70 | 9623.64 | 0.0001 | 0.00001 | 68733 | 0.14001 | 7.1421 | 50.9632 | 7.1356 |
| 75 | 18530 | 0.0001 | 0.00001 | | 0.14001 | 7.1425 | 50.9887 | 7.1388 |
| 80 | 35677 | | | | 0.14000 | 7.1427 | 51.0030 | 7.1406 |
| 85 | 68693 | | | | 0.14000 | 7.1428 | 51.0108 | 7.1416 |

TABLE 19 Discrete Cash Flow: Compound Interest Factors

| 15% | TABLE 19 Discrete Cash Flow: Compound Interest Factors | | | | | | | 15% |
|-----|--|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1500 | 0.8696 | 1.00000 | 1.0000 | 1.15000 | 0.8696 | | |
| 2 | 1.3225 | 0.7561 | 0.46512 | 2.1500 | 0.61512 | 1.6257 | 0.7561 | 0.4651 |
| 3 | 1.5209 | 0.6575 | 0.28798 | 3.4725 | 0.43798 | 2.2832 | 2.0712 | 0.9071 |
| 4 | 1.7490 | 0.5718 | 0.20027 | 4.9934 | 0.35027 | 2.8550 | 3.7864 | 1.3263 |
| 5 | 2.0114 | 0.4972 | 0.14832 | 6.7424 | 0.29832 | 3.3522 | 5.7751 | 1.7228 |
| 6 | 2.3131 | 0.4323 | 0.11424 | 8.7537 | 0.26424 | 3.7845 | 7.9368 | 2.0972 |
| 7 | 2.6600 | 0.3759 | 0.09036 | 11.0668 | 0.24036 | 4.1604 | 10.1924 | 2.4498 |
| 8 | 3.0590 | 0.3269 | 0.07285 | 13.7268 | 0.22285 | 4.4873 | 12.4807 | 2.7813 |
| 9 | 3.5179 | 0.2843 | 0.05957 | 16.7858 | 0.20957 | 4.7716 | 14.7548 | 3.0922 |
| 10 | 4.0456 | 0.2472 | 0.04925 | 20.3037 | 0.19925 | 5.0188 | 16.9795 | 3.3832 |
| 11 | 4.6524 | 0.2149 | 0.04107 | 24.3493 | 0.19107 | 5.2337 | 19.1289 | 3.6549 |
| 12 | 5.3503 | 0.1869 | 0.03448 | 29.0017 | 0.18448 | 5.4206 | 21.1849 | 3.9082 |
| 13 | 6.1528 | 0.1625 | 0.02911 | 34.3519 | 0.17911 | 5.5831 | 23.1352 | 4.1438 |
| 14 | 7.0757 | 0.1413 | 0.02469 | 40.5047 | 0.17469 | 5.7245 | 24.9725 | 4.3624 |
| 15 | 8.1371 | 0.1229 | 0.02102 | 47.5804 | 0.17102 | 5.8474 | 26.6930 | 4.5650 |
| 16 | 9.3576 | 0.1069 | 0.01795 | 55.7175 | 0.16795 | 5.9542 | 28.2960 | 4.7522 |
| 17 | 10.7613 | 0.0929 | 0.01537 | 65.0751 | 0.16537 | 6.0472 | 29.7828 | 4.9251 |
| 18 | 12.3755 | 0.0808 | 0.01319 | 75.8364 | 0.16319 | 6.1280 | 31.1565 | 5.0843 |
| 19 | 14.2318 | 0.0703 | 0.01134 | 88.2118 | 0.16134 | 6.1982 | 32.4213 | 5.2307 |
| 20 | 16.3665 | 0.0611 | 0.00976 | 102.4436 | 0.15976 | 6.2593 | 33.5822 | 5.3651 |
| 21 | 18.8215 | 0.0531 | 0.00842 | 118.8101 | 0.15842 | 6.3125 | 34.6448 | 5.4883 |
| 22 | 21.6447 | 0.0462 | 0.00727 | 137.6316 | 0.15727 | 6.3587 | 35.6150 | 5.6010 |
| 23 | 24.8915 | 0.0402 | 0.00628 | 159.2764 | 0.15628 | 6.3988 | 36.4988 | 5.7040 |
| 24 | 28.6252 | 0.0349 | 0.00543 | 184.1678 | 0.15543 | 6.4338 | 37.3023 | 5.7979 |
| 25 | 32.9190 | 0.0304 | 0.00470 | 212.7930 | 0.15470 | 6.4641 | 38.0314 | 5.8834 |
| 26 | 37.8568 | 0.0264 | 0.00407 | 245.7120 | 0.15407 | 6.4906 | 38.6918 | 5.9612 |
| 27 | 43.5353 | 0.0230 | 0.00353 | 283.5688 | 0.15353 | 6.5135 | 39.2890 | 6.0319 |
| 28 | 50.0656 | 0.0200 | 0.00306 | 327.1041 | 0.15306 | 6.5335 | 39.8283 | 6.0960 |
| 29 | 57.5755 | 0.0174 | 0.00265 | 377.1697 | 0.15265 | 6.5509 | 40.3146 | 6.1541 |
| 30 | 66.2118 | 0.0151 | 0.00230 | 434.7451 | 0.15230 | 6.5660 | 40.7526 | 6.2066 |
| 31 | 76.1435 | 0.0131 | 0.00200 | 500.9569 | 0.15200 | 6.5791 | 41.1466 | 6.2541 |
| 32 | 87.5651 | 0.0114 | 0.00173 | 577.1005 | 0.15173 | 6.5905 | 41.5006 | 6.2970 |
| 33 | 100.6998 | 0.0099 | 0.00150 | 664.6655 | 0.15150 | 6.6005 | 41.8184 | 6.3357 |
| 34 | 115.8048 | 0.0086 | 0.00131 | 765.3654 | 0.15131 | 6.6091 | 42.1033 | 6.3705 |
| 35 | 133.1755 | 0.0075 | 0.00113 | 881.1702 | 0.15113 | 6.6166 | 42.3586 | 6.4019 |
| 40 | 267.8635 | 0.0037 | 0.00056 | 1779.09 | 0.15056 | 6.6418 | 43.2830 | 6.5168 |
| 45 | 538.7693 | 0.0019 | 0.00028 | 3585.13 | 0.15028 | 6.6543 | 43.8051 | 6.5830 |
| 50 | 1083.66 | 0.0009 | 0.00014 | 7217.72 | 0.15014 | 6.6605 | 44.0958 | 6.6205 |
| 55 | 2179.62 | 0.0005 | 0.00007 | 14524 | 0.15007 | 6.6636 | 44.2558 | 6.6414 |
| 60 | 4384.00 | 0.0002 | 0.00003 | 29220 | 0.15003 | 6.6651 | 44.3431 | 6.6530 |
| 65 | 8817.79 | 0.0001 | 0.00002 | 58779 | 0.15002 | 6.6659 | 44.3903 | 6.6593 |
| 70 | 17736 | 0.0001 | 0.00001 | | 0.15001 | 6.6663 | 44.4156 | 6.6627 |
| 75 | 35673 | | | | 0.15000 | 6.6665 | 44.4292 | 6.6646 |
| 80 | 71751 | | | | 0.15000 | 6.6666 | 44.4364 | 6.6656 |
| 85 | | | | | 0.15000 | 6.6666 | 44.4402 | 6.6661 |

16% **TABLE 20** Discrete Cash Flow: Compound Interest Factors **16%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1600 | 0.8621 | 1.00000 | 1.0000 | 1.16000 | 0.8621 | | |
| 2 | 1.3456 | 0.7432 | 0.46296 | 2.1600 | 0.62296 | 1.6052 | 0.7432 | 0.4630 |
| 3 | 1.5609 | 0.6407 | 0.28526 | 3.5056 | 0.44526 | 2.2459 | 2.0245 | 0.9014 |
| 4 | 1.8106 | 0.5523 | 0.19738 | 5.0665 | 0.35738 | 2.7982 | 3.6814 | 1.3156 |
| 5 | 2.1003 | 0.4761 | 0.14541 | 6.8771 | 0.30541 | 3.2743 | 5.5858 | 1.7060 |
| 6 | 2.4364 | 0.4104 | 0.11139 | 8.9775 | 0.27139 | 3.6847 | 7.6380 | 2.0729 |
| 7 | 2.8262 | 0.3538 | 0.08761 | 11.4139 | 0.24761 | 4.0386 | 9.7610 | 2.4169 |
| 8 | 3.2784 | 0.3050 | 0.07022 | 14.2401 | 0.23022 | 4.3436 | 11.8962 | 2.7388 |
| 9 | 3.8030 | 0.2630 | 0.05708 | 17.5185 | 0.21708 | 4.6065 | 13.9998 | 3.0391 |
| 10 | 4.4114 | 0.2267 | 0.04690 | 21.3215 | 0.20690 | 4.8332 | 16.0399 | 3.3187 |
| 11 | 5.1173 | 0.1954 | 0.03886 | 25.7329 | 0.19886 | 5.0286 | 17.9941 | 3.5783 |
| 12 | 5.9360 | 0.1685 | 0.03241 | 30.8502 | 0.19241 | 5.1971 | 19.8472 | 3.8189 |
| 13 | 6.8858 | 0.1452 | 0.02718 | 36.7862 | 0.18718 | 5.3423 | 21.5899 | 4.0413 |
| 14 | 7.9875 | 0.1252 | 0.02290 | 43.6720 | 0.18290 | 5.4675 | 23.2175 | 4.2464 |
| 15 | 9.2655 | 0.1079 | 0.01936 | 51.6595 | 0.17936 | 5.5755 | 24.7284 | 4.4352 |
| 16 | 10.7480 | 0.0930 | 0.01641 | 60.9250 | 0.17641 | 5.6685 | 26.1241 | 4.6086 |
| 17 | 12.4677 | 0.0802 | 0.01395 | 71.6730 | 0.17395 | 5.7487 | 27.4074 | 4.7676 |
| 18 | 14.4625 | 0.0691 | 0.01188 | 84.1407 | 0.17188 | 5.8178 | 28.5828 | 4.9130 |
| 19 | 16.7765 | 0.0596 | 0.01014 | 98.6032 | 0.17014 | 5.8775 | 29.6557 | 5.0457 |
| 20 | 19.4608 | 0.0514 | 0.00867 | 115.3797 | 0.16867 | 5.9288 | 30.6321 | 5.1666 |
| 22 | 26.1864 | 0.0382 | 0.00635 | 157.4150 | 0.16635 | 6.0113 | 32.3200 | 5.3765 |
| 24 | 35.2364 | 0.0284 | 0.00467 | 213.9776 | 0.16467 | 6.0726 | 33.6970 | 5.5490 |
| 26 | 47.4141 | 0.0211 | 0.00345 | 290.0883 | 0.16345 | 6.1182 | 34.8114 | 5.6898 |
| 28 | 63.8004 | 0.0157 | 0.00255 | 392.5028 | 0.16255 | 6.1520 | 35.7073 | 5.8041 |
| 30 | 85.8499 | 0.0116 | 0.00189 | 530.3117 | 0.16189 | 6.1772 | 36.4234 | 5.8964 |
| 32 | 115.5196 | 0.0087 | 0.00140 | 715.7475 | 0.16140 | 6.1959 | 36.9930 | 5.9706 |
| 34 | 155.4432 | 0.0064 | 0.00104 | 965.2698 | 0.16104 | 6.2098 | 37.4441 | 6.0299 |
| 35 | 180.3141 | 0.0055 | 0.00089 | 1120.71 | 0.16089 | 6.2153 | 37.6327 | 6.0548 |
| 36 | 209.1643 | 0.0048 | 0.00077 | 1301.03 | 0.16077 | 6.2201 | 37.8000 | 6.0771 |
| 38 | 281.4515 | 0.0036 | 0.00057 | 1752.82 | 0.16057 | 6.2278 | 38.0799 | 6.1145 |
| 40 | 378.7212 | 0.0026 | 0.00042 | 2360.76 | 0.16042 | 6.2335 | 38.2992 | 6.1441 |
| 45 | 795.4438 | 0.0013 | 0.00020 | 4965.27 | 0.16020 | 6.2421 | 38.6598 | 6.1934 |
| 50 | 1670.70 | 0.0006 | 0.00010 | 10436 | 0.16010 | 6.2463 | 38.8521 | 6.2201 |
| 55 | 3509.05 | 0.0003 | 0.00005 | 21925 | 0.16005 | 6.2482 | 38.9534 | 6.2343 |
| 60 | 7370.20 | 0.0001 | 0.00002 | 46058 | 0.16002 | 6.2492 | 39.0063 | 6.2419 |

18% **TABLE 21** Discrete Cash Flow: Compound Interest Factors **18%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.1800 | 0.8475 | 1.00000 | 1.0000 | 1.18000 | 0.8475 | 0.7182 | 0.4587 |
| 2 | 1.3924 | 0.7182 | 0.45872 | 2.1800 | 0.63872 | 1.5656 | 1.9354 | 0.8902 |
| 3 | 1.6430 | 0.6086 | 0.27992 | 3.5724 | 0.45992 | 2.1743 | 3.4828 | 1.2947 |
| 4 | 1.9388 | 0.5158 | 0.19174 | 5.2154 | 0.37174 | 2.6901 | 5.2312 | 1.6728 |
| 5 | 2.2878 | 0.4371 | 0.13978 | 7.1542 | 0.31978 | 3.1272 | 7.0834 | 2.0252 |
| 6 | 2.6996 | 0.3704 | 0.10591 | 9.4420 | 0.28591 | 3.4976 | 8.9670 | 2.3526 |
| 7 | 3.1855 | 0.3139 | 0.08236 | 12.1415 | 0.26236 | 3.8115 | 10.8292 | 2.6558 |
| 8 | 3.7589 | 0.2660 | 0.06524 | 15.3270 | 0.24524 | 4.0776 | 12.6329 | 2.9358 |
| 9 | 4.4355 | 0.2255 | 0.05239 | 19.0859 | 0.23239 | 4.3030 | 14.3525 | 3.1936 |
| 10 | 5.2338 | 0.1911 | 0.04251 | 23.5213 | 0.22251 | 4.4941 | 15.9716 | 3.4303 |
| 11 | 6.1759 | 0.1619 | 0.03478 | 28.7551 | 0.21478 | 4.6560 | 17.4811 | 3.6470 |
| 12 | 7.2876 | 0.1372 | 0.02863 | 34.9311 | 0.20863 | 4.7932 | 18.8765 | 3.8449 |
| 13 | 8.5994 | 0.1163 | 0.02369 | 42.2187 | 0.20369 | 4.9095 | 20.1576 | 4.0250 |
| 14 | 10.1472 | 0.0985 | 0.01968 | 50.8180 | 0.19968 | 5.0081 | 21.3269 | 4.1887 |
| 15 | 11.9737 | 0.0835 | 0.01640 | 60.9653 | 0.19640 | 5.0916 | 22.3885 | 4.3369 |
| 16 | 14.1290 | 0.0708 | 0.01371 | 72.9390 | 0.19371 | 5.1624 | 23.3482 | 4.4708 |
| 17 | 16.6722 | 0.0600 | 0.01149 | 87.0680 | 0.19149 | 5.2223 | 24.2123 | 4.5916 |
| 18 | 19.6733 | 0.0508 | 0.00964 | 103.7403 | 0.18964 | 5.2732 | 24.9877 | 4.7003 |
| 19 | 23.2144 | 0.0431 | 0.00810 | 123.4135 | 0.18810 | 5.3162 | 25.6813 | 4.7978 |
| 20 | 27.3930 | 0.0365 | 0.00682 | 146.6280 | 0.18682 | 5.3527 | 26.8506 | 4.9632 |
| 22 | 38.1421 | 0.0262 | 0.00485 | 206.3448 | 0.18485 | 5.4099 | 27.7725 | 5.0950 |
| 24 | 53.1090 | 0.0188 | 0.00345 | 289.4945 | 0.18345 | 5.4509 | 28.4935 | 5.1991 |
| 26 | 73.9490 | 0.0135 | 0.00247 | 405.2721 | 0.18247 | 5.4804 | 29.0537 | 5.2810 |
| 28 | 102.9666 | 0.0097 | 0.00177 | 566.4809 | 0.18177 | 5.5016 | 29.4864 | 5.3448 |
| 30 | 143.3706 | 0.0070 | 0.00126 | 790.9480 | 0.18126 | 5.5168 | 29.8191 | 5.3945 |
| 32 | 199.6293 | 0.0050 | 0.00091 | 1103.50 | 0.18091 | 5.5277 | 30.0736 | 5.4328 |
| 34 | 277.9638 | 0.0036 | 0.00065 | 1538.69 | 0.18065 | 5.5356 | 30.1773 | 5.4485 |
| 35 | 327.9973 | 0.0030 | 0.00055 | 1816.65 | 0.18055 | 5.5386 | 30.2677 | 5.4623 |
| 36 | 387.0368 | 0.0026 | 0.00047 | 2144.65 | 0.18047 | 5.5412 | 30.4152 | 5.4849 |
| 38 | 538.9100 | 0.0019 | 0.00033 | 2988.39 | 0.18033 | 5.5452 | 30.5269 | 5.5022 |
| 40 | 750.3783 | 0.0013 | 0.00024 | 4163.21 | 0.18024 | 5.5482 | 30.7006 | 5.5293 |
| 45 | 1716.68 | 0.0006 | 0.00010 | 9531.58 | 0.18010 | 5.5523 | 30.7856 | 5.5428 |
| 50 | 3927.36 | 0.0003 | 0.00005 | 21813 | 0.18005 | 5.5541 | 30.8268 | 5.5494 |
| 55 | 8984.84 | 0.0001 | 0.00002 | 49910 | 0.18002 | 5.5549 | 30.8465 | 5.5526 |
| 60 | 20555 | | | 114190 | 0.18001 | 5.5553 | | |

20% TABLE 22 Discrete Cash Flow: Compound Interest Factors 20%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.2000 | 0.8333 | 1.00000 | 1.0000 | 1.20000 | 0.8333 | | |
| 2 | 1.4400 | 0.6944 | 0.45455 | 2.2000 | 0.65455 | 1.5278 | 0.6944 | 0.4545 |
| 3 | 1.7280 | 0.5787 | 0.27473 | 3.6400 | 0.47473 | 2.1065 | 1.8519 | 0.8791 |
| 4 | 2.0736 | 0.4823 | 0.18629 | 5.3680 | 0.38629 | 2.5887 | 3.2986 | 1.2742 |
| 5 | 2.4883 | 0.4019 | 0.13438 | 7.4416 | 0.33438 | 2.9906 | 4.9061 | 1.6405 |
| 6 | 2.9860 | 0.3349 | 0.10071 | 9.9299 | 0.30071 | 3.3255 | 6.5806 | 1.9788 |
| 7 | 3.5832 | 0.2791 | 0.07742 | 12.9159 | 0.27742 | 3.6046 | 8.2551 | 2.2902 |
| 8 | 4.2998 | 0.2326 | 0.06061 | 16.4991 | 0.26061 | 3.8372 | 9.8831 | 2.5756 |
| 9 | 5.1598 | 0.1938 | 0.04808 | 20.7989 | 0.24808 | 4.0310 | 11.4335 | 2.8364 |
| 10 | 6.1917 | 0.1615 | 0.03852 | 25.9587 | 0.23852 | 4.1925 | 12.8871 | 3.0739 |
| 11 | 7.4301 | 0.1346 | 0.03110 | 32.1504 | 0.23110 | 4.3271 | 14.2330 | 3.2893 |
| 12 | 8.9161 | 0.1122 | 0.02526 | 39.5805 | 0.22526 | 4.4392 | 15.4667 | 3.4841 |
| 13 | 10.6993 | 0.0935 | 0.02062 | 48.4966 | 0.22062 | 4.5327 | 16.5883 | 3.6597 |
| 14 | 12.8392 | 0.0779 | 0.01689 | 59.1959 | 0.21689 | 4.6106 | 17.6008 | 3.8175 |
| 15 | 15.4070 | 0.0649 | 0.01388 | 72.0351 | 0.21388 | 4.6755 | 18.5095 | 3.9588 |
| 16 | 18.4884 | 0.0541 | 0.01144 | 87.4421 | 0.21144 | 4.7296 | 19.3208 | 4.0851 |
| 17 | 22.1861 | 0.0451 | 0.00944 | 105.9306 | 0.20944 | 4.7746 | 20.0419 | 4.1976 |
| 18 | 26.6233 | 0.0376 | 0.00781 | 128.1167 | 0.20781 | 4.8122 | 20.6805 | 4.2975 |
| 19 | 31.9480 | 0.0313 | 0.00646 | 154.7400 | 0.20646 | 4.8435 | 21.2439 | 4.3861 |
| 20 | 38.3376 | 0.0261 | 0.00536 | 186.6880 | 0.20536 | 4.8696 | 21.7395 | 4.4643 |
| 22 | 55.2061 | 0.0181 | 0.00369 | 271.0307 | 0.20369 | 4.9094 | 22.5546 | 4.5941 |
| 24 | 79.4968 | 0.0126 | 0.00255 | 392.4842 | 0.20255 | 4.9371 | 23.1760 | 4.6943 |
| 26 | 114.4755 | 0.0087 | 0.00176 | 567.3773 | 0.20176 | 4.9563 | 23.6460 | 4.7709 |
| 28 | 164.8447 | 0.0061 | 0.00122 | 819.2233 | 0.20122 | 4.9697 | 23.9991 | 4.8291 |
| 30 | 237.3763 | 0.0042 | 0.00085 | 1181.88 | 0.20085 | 4.9789 | 24.2628 | 4.8731 |
| 32 | 341.8219 | 0.0029 | 0.00059 | 1704.11 | 0.20059 | 4.9854 | 24.4588 | 4.9061 |
| 34 | 492.2235 | 0.0020 | 0.00041 | 2456.12 | 0.20041 | 4.9898 | 24.6038 | 4.9308 |
| 35 | 590.6682 | 0.0017 | 0.00034 | 2948.34 | 0.20034 | 4.9915 | 24.6614 | 4.9406 |
| 36 | 708.8019 | 0.0014 | 0.00028 | 3539.01 | 0.20028 | 4.9929 | 24.7108 | 4.9491 |
| 38 | 1020.67 | 0.0010 | 0.00020 | 5098.37 | 0.20020 | 4.9951 | 24.7894 | 4.9627 |
| 40 | 1469.77 | 0.0007 | 0.00014 | 7343.86 | 0.20014 | 4.9966 | 24.8469 | 4.9728 |
| 45 | 3657.26 | 0.0003 | 0.00005 | 18281 | 0.20005 | 4.9986 | 24.9316 | 4.9877 |
| 50 | 9100.44 | 0.0001 | 0.00002 | 45497 | 0.20002 | 4.9995 | 24.9698 | 4.9945 |
| 55 | 22645 | | 0.00001 | | 0.20001 | 4.9998 | 24.9868 | 4.9976 |

22%

TABLE 23 Discrete Cash Flow: Compound Interest Factors

22%

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.2200 | 0.8197 | 1.00000 | 1.0000 | 1.22000 | 0.8197 | | |
| 2 | 1.4884 | 0.6719 | 0.45045 | 2.2200 | 0.67045 | 1.4915 | 0.6719 | 0.4505 |
| 3 | 1.8158 | 0.5507 | 0.26966 | 3.7084 | 0.48966 | 2.0422 | 1.7733 | 0.8683 |
| 4 | 2.2153 | 0.4514 | 0.18102 | 5.5242 | 0.40102 | 2.4936 | 3.1275 | 1.2542 |
| 5 | 2.7027 | 0.3700 | 0.12921 | 7.7396 | 0.34921 | 2.8636 | 4.6075 | 1.6090 |
| 6 | 3.2973 | 0.3033 | 0.09576 | 10.4423 | 0.31576 | 3.1669 | 6.1239 | 1.9337 |
| 7 | 4.0227 | 0.2486 | 0.07278 | 13.7396 | 0.29278 | 3.4155 | 7.6154 | 2.2297 |
| 8 | 4.9077 | 0.2038 | 0.05630 | 17.7623 | 0.27630 | 3.6193 | 9.0417 | 2.4982 |
| 9 | 5.9874 | 0.1670 | 0.04411 | 22.6700 | 0.26411 | 3.7863 | 10.3779 | 2.7409 |
| 10 | 7.3046 | 0.1369 | 0.03489 | 28.6574 | 0.25489 | 3.9232 | 11.6100 | 2.9593 |
| 11 | 8.9117 | 0.1122 | 0.02781 | 35.9620 | 0.24781 | 4.0354 | 12.7321 | 3.1551 |
| 12 | 10.8722 | 0.0920 | 0.02228 | 44.8737 | 0.24228 | 4.1274 | 13.7438 | 3.3299 |
| 13 | 13.2641 | 0.0754 | 0.01794 | 55.7459 | 0.23794 | 4.2028 | 14.6485 | 3.4855 |
| 14 | 16.1822 | 0.0618 | 0.01449 | 69.0100 | 0.23449 | 4.2646 | 15.4519 | 3.6233 |
| 15 | 19.7423 | 0.0507 | 0.01174 | 85.1922 | 0.23174 | 4.3152 | 16.1610 | 3.7451 |
| 16 | 24.0856 | 0.0415 | 0.00953 | 104.9345 | 0.22953 | 4.3567 | 16.7838 | 3.8524 |
| 17 | 29.3844 | 0.0340 | 0.00775 | 129.0201 | 0.22775 | 4.3908 | 17.3283 | 3.9465 |
| 18 | 35.8490 | 0.0279 | 0.00631 | 158.4045 | 0.22631 | 4.4187 | 17.8025 | 4.0289 |
| 19 | 43.7358 | 0.0229 | 0.00515 | 194.2535 | 0.22515 | 4.4415 | 18.2141 | 4.1009 |
| 20 | 53.3576 | 0.0187 | 0.00420 | 237.9893 | 0.22420 | 4.4603 | 18.5702 | 4.1635 |
| 22 | 79.4175 | 0.0126 | 0.00281 | 356.4432 | 0.22281 | 4.4882 | 19.1418 | 4.2649 |
| 24 | 118.2050 | 0.0085 | 0.00188 | 532.7501 | 0.22188 | 4.5070 | 19.5635 | 4.3407 |
| 26 | 175.9364 | 0.0057 | 0.00126 | 795.1653 | 0.22126 | 4.5196 | 19.8720 | 4.3968 |
| 28 | 261.8637 | 0.0038 | 0.00084 | 1185.74 | 0.22084 | 4.5281 | 20.0962 | 4.4381 |
| 30 | 389.7579 | 0.0026 | 0.00057 | 1767.08 | 0.22057 | 4.5338 | 20.2583 | 4.4683 |
| 32 | 580.1156 | 0.0017 | 0.00038 | 2632.34 | 0.22038 | 4.5376 | 20.3748 | 4.4902 |
| 34 | 863.4441 | 0.0012 | 0.00026 | 3920.20 | 0.22026 | 4.5402 | 20.4582 | 4.5060 |
| 35 | 1053.40 | 0.0009 | 0.00021 | 4783.64 | 0.22021 | 4.5411 | 20.4905 | 4.5122 |
| 36 | 1285.15 | 0.0008 | 0.00017 | 5837.05 | 0.22017 | 4.5419 | 20.5178 | 4.5174 |
| 38 | 1912.82 | 0.0005 | 0.00012 | 8690.08 | 0.22012 | 4.5431 | 20.5601 | 4.5256 |
| 40 | 2847.04 | 0.0004 | 0.00008 | 12937 | 0.22008 | 4.5439 | 20.5900 | 4.5314 |
| 45 | 7694.71 | 0.0001 | 0.00003 | 34971 | 0.22003 | 4.5449 | 20.6319 | 4.5396 |
| 50 | 20797 | | 0.00001 | 94525 | 0.22001 | 4.5452 | 20.6492 | 4.5431 |
| 55 | 56207 | | | | 0.22000 | 4.5454 | 20.6563 | 4.5445 |

24% **TABLE 24** Discrete Cash Flow: Compound Interest Factors **24%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.2400 | 0.8065 | 1.00000 | 1.0000 | 1.24000 | 0.8065 | | |
| 2 | 1.5376 | 0.6504 | 0.44643 | 2.2400 | 0.68643 | 1.4568 | 0.6504 | 0.4464 |
| 3 | 1.9066 | 0.5245 | 0.26472 | 3.7776 | 0.50472 | 1.9813 | 1.6993 | 0.8577 |
| 4 | 2.3642 | 0.4230 | 0.17593 | 5.6842 | 0.41593 | 2.4043 | 2.9683 | 1.2346 |
| 5 | 2.9316 | 0.3411 | 0.12425 | 8.0484 | 0.36425 | 2.7454 | 4.3327 | 1.5782 |
| 6 | 3.6352 | 0.2751 | 0.09107 | 10.9801 | 0.33107 | 3.0205 | 5.7081 | 1.8898 |
| 7 | 4.5077 | 0.2218 | 0.06842 | 14.6153 | 0.30842 | 3.2423 | 7.0392 | 2.1710 |
| 8 | 5.5895 | 0.1789 | 0.05229 | 19.1229 | 0.29229 | 3.4212 | 8.2915 | 2.4236 |
| 9 | 6.9310 | 0.1443 | 0.04047 | 24.7125 | 0.28047 | 3.5655 | 9.4458 | 2.6492 |
| 10 | 8.5944 | 0.1164 | 0.03160 | 31.6434 | 0.27160 | 3.6819 | 10.4930 | 2.8499 |
| 11 | 10.6571 | 0.0938 | 0.02485 | 40.2379 | 0.26485 | 3.7757 | 11.4313 | 3.0276 |
| 12 | 13.2148 | 0.0757 | 0.01965 | 50.8950 | 0.25965 | 3.8514 | 12.2637 | 3.1843 |
| 13 | 16.3863 | 0.0610 | 0.01560 | 64.1097 | 0.25560 | 3.9124 | 12.9960 | 3.3218 |
| 14 | 20.3191 | 0.0492 | 0.01242 | 80.4961 | 0.25242 | 3.9616 | 13.6358 | 3.4420 |
| 15 | 25.1956 | 0.0397 | 0.00992 | 100.8151 | 0.24992 | 4.0013 | 14.1915 | 3.5467 |
| 16 | 31.2426 | 0.0320 | 0.00794 | 126.0108 | 0.24794 | 4.0333 | 14.6716 | 3.6376 |
| 17 | 38.7408 | 0.0258 | 0.00636 | 157.2534 | 0.24636 | 4.0591 | 15.0846 | 3.7162 |
| 18 | 48.0386 | 0.0208 | 0.00510 | 195.9942 | 0.24510 | 4.0799 | 15.4385 | 3.7840 |
| 19 | 59.5679 | 0.0168 | 0.00410 | 244.0328 | 0.24410 | 4.0967 | 15.7406 | 3.8423 |
| 20 | 73.8641 | 0.0135 | 0.00329 | 303.6006 | 0.24329 | 4.1103 | 15.9979 | 3.8922 |
| 22 | 113.5735 | 0.0088 | 0.00213 | 469.0563 | 0.24213 | 4.1300 | 16.4011 | 3.9712 |
| 24 | 174.6306 | 0.0057 | 0.00138 | 723.4610 | 0.24138 | 4.1428 | 16.6891 | 4.0284 |
| 26 | 268.5121 | 0.0037 | 0.00090 | 1114.63 | 0.24090 | 4.1511 | 16.8930 | 4.0695 |
| 28 | 412.8642 | 0.0024 | 0.00058 | 1716.10 | 0.24058 | 4.1566 | 17.0365 | 4.0987 |
| 30 | 634.8199 | 0.0016 | 0.00038 | 2640.92 | 0.24038 | 4.1601 | 17.1369 | 4.1193 |
| 32 | 976.0991 | 0.0010 | 0.00025 | 4062.91 | 0.24025 | 4.1624 | 17.2067 | 4.1338 |
| 34 | 1500.85 | 0.0007 | 0.00016 | 6249.38 | 0.24016 | 4.1639 | 17.2552 | 4.1440 |
| 35 | 1861.05 | 0.0005 | 0.00013 | 7750.23 | 0.24013 | 4.1664 | 17.2734 | 4.1479 |
| 36 | 2307.71 | 0.0004 | 0.00010 | 9611.28 | 0.24010 | 4.1649 | 17.2886 | 4.1511 |
| 38 | 3548.33 | 0.0003 | 0.00007 | 14781 | 0.24007 | 4.1655 | 17.3116 | 4.1560 |
| 40 | 5455.91 | 0.0002 | 0.00004 | 22729 | 0.24004 | 4.1659 | 17.3274 | 4.1593 |
| 45 | 15995 | 0.0001 | 0.00002 | 66640 | 0.24002 | 4.1664 | 17.3483 | 4.1639 |
| 50 | 46890 | | 0.00001 | | 0.24001 | 4.1666 | 17.3563 | 4.1653 |
| 55 | | | | | 0.24000 | 4.1666 | 17.3593 | 4.1663 |

25% **TABLE 25** Discrete Cash Flow: Compound Interest Factors **25%**

| n | Single Payments | | Uniform Series Payments | | | | Arithmetic Gradients | |
|----|---------------------------|-------------------------|-------------------------|---------------------------|----------------------------|-------------------------|----------------------------------|-----------------------------------|
| | F/P Compound Amount | P/F Present Worth | A/F Sinking Fund | F/A Compound Amount | A/P Capital Recovery | P/A Present Worth | P/G Gradient Present Worth | A/G Gradient Uniform Series |
| 1 | 1.2500 | 0.8000 | 1.00000 | 1.0000 | 1.25000 | 0.8000 | | |
| 2 | 1.5625 | 0.6400 | 0.44444 | 2.2500 | 0.69444 | 1.4400 | 0.6400 | 0.4444 |
| 3 | 1.9531 | 0.5120 | 0.26230 | 3.8125 | 0.51230 | 1.9520 | 1.6640 | 0.8525 |
| 4 | 2.4414 | 0.4096 | 0.17344 | 5.7656 | 0.42344 | 2.3616 | 2.8928 | 1.2249 |
| 5 | 3.0518 | 0.3277 | 0.12185 | 8.2070 | 0.37185 | 2.6893 | 4.2035 | 1.5631 |
| 6 | 3.8147 | 0.2621 | 0.08882 | 11.2588 | 0.33882 | 2.9514 | 5.5142 | 1.8683 |
| 7 | 4.7684 | 0.2097 | 0.06634 | 15.0735 | 0.31634 | 3.1611 | 6.7725 | 2.1424 |
| 8 | 5.9605 | 0.1678 | 0.05040 | 19.8419 | 0.30040 | 3.3289 | 7.9469 | 2.3872 |
| 9 | 7.4506 | 0.1342 | 0.03876 | 25.8023 | 0.28876 | 3.4631 | 9.0207 | 2.6048 |
| 10 | 9.3132 | 0.1074 | 0.03007 | 33.2529 | 0.28007 | 3.5705 | 9.9870 | 2.7971 |
| 11 | 11.6415 | 0.0859 | 0.02349 | 42.5661 | 0.27349 | 3.6564 | 10.8460 | 2.9663 |
| 12 | 14.5519 | 0.0687 | 0.01845 | 54.2077 | 0.26845 | 3.7251 | 11.6020 | 3.1145 |
| 13 | 18.1899 | 0.0550 | 0.01454 | 68.7596 | 0.26454 | 3.7801 | 12.2617 | 3.2437 |
| 14 | 22.7374 | 0.0440 | 0.01150 | 86.9495 | 0.26150 | 3.8241 | 12.8334 | 3.3559 |
| 15 | 28.4217 | 0.0352 | 0.00912 | 109.6868 | 0.25912 | 3.8593 | 13.3260 | 3.4530 |
| 16 | 35.5271 | 0.0281 | 0.00724 | 138.1085 | 0.25724 | 3.8874 | 13.7482 | 3.5366 |
| 17 | 44.4089 | 0.0225 | 0.00576 | 173.6357 | 0.25576 | 3.9099 | 14.1085 | 3.6084 |
| 18 | 55.5112 | 0.0180 | 0.00459 | 218.0446 | 0.25459 | 3.9279 | 14.4147 | 3.6698 |
| 19 | 69.3889 | 0.0144 | 0.00366 | 273.5558 | 0.25366 | 3.9424 | 14.6741 | 3.7222 |
| 20 | 86.7362 | 0.0115 | 0.00292 | 342.9447 | 0.25292 | 3.9539 | 14.8932 | 3.7667 |
| 22 | 135.5253 | 0.0074 | 0.00186 | 538.1011 | 0.25186 | 3.9705 | 15.2326 | 3.8365 |
| 24 | 211.7582 | 0.0047 | 0.00119 | 843.0329 | 0.25119 | 3.9811 | 15.4711 | 3.8861 |
| 26 | 330.8722 | 0.0030 | 0.00076 | 1319.49 | 0.25076 | 3.9879 | 15.6373 | 3.9212 |
| 28 | 516.9879 | 0.0019 | 0.00048 | 2063.95 | 0.25048 | 3.9923 | 15.7524 | 3.9457 |
| 30 | 807.7936 | 0.0012 | 0.00031 | 3227.17 | 0.25031 | 3.9950 | 15.8316 | 3.9628 |
| 32 | 1262.18 | 0.0008 | 0.00020 | 5044.71 | 0.25020 | 3.9968 | 15.8859 | 3.9746 |
| 34 | 1972.15 | 0.0005 | 0.00013 | 7884.61 | 0.25013 | 3.9980 | 15.9229 | 3.9828 |
| 35 | 2465.19 | 0.0004 | 0.00010 | 9856.76 | 0.25010 | 3.9984 | 15.9367 | 3.9858 |
| 36 | 3081.49 | 0.0003 | 0.00008 | 12322 | 0.25008 | 3.9987 | 15.9481 | 3.9883 |
| 38 | 4814.82 | 0.0002 | 0.00005 | 19255 | 0.25005 | 3.9992 | 15.9651 | 3.9921 |
| 40 | 7523.16 | 0.0001 | 0.00003 | 30089 | 0.25003 | 3.9995 | 15.9766 | 3.9947 |
| 45 | 22959 | | 0.00001 | 91831 | 0.25001 | 3.9998 | 15.9915 | 3.9980 |
| 50 | 70065 | | | | 0.25000 | 3.9999 | 15.9969 | 3.9993 |
| 55 | | | | | 0.25000 | 4.0000 | 15.9989 | 3.9997 |
| | | | | | | | | |