

1/2% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N	
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor		
	(F/P, 1/2%, N)	(P/F, 1/2%, N)	(A/P, 1/2%, N)	(P/A, 1/2%, N)	(A/F, 1/2%, N)	(F/A, 1/2%, N)	(A/G, 1/2%, N)	
1	1.00500	0.99502	1.00600	0.99602	1.00000	0.00000	1	
2	1.01003	0.99007	0.50375	1.98510	0.49875	2.00500	0.49875	2
3	1.01508	0.98515	0.33667	2.97025	0.33167	3.01503	0.99667	3
4	1.02015	0.98025	0.25313	3.96050	0.24813	4.03010	1.49377	4
5	1.02525	0.97537	0.20301	4.92587	0.19801	5.05025	1.99003	5
6	1.03038	0.97052	0.16960	5.89638	0.16460	6.07550	2.48545	6
7	1.03553	0.96569	0.14573	6.86207	0.14073	7.10588	2.98005	7
8	1.04071	0.96089	0.12783	7.82296	0.12263	8.14141	3.47382	8
9	1.04591	0.95610	0.11391	8.77906	0.10891	9.18212	3.96675	9
10	1.05114	0.95135	0.10277	9.73041	0.09777	10.22803	4.45895	10
11	1.05640	0.94661	0.09366	10.67703	0.08866	11.27917	4.95013	11
12	1.06168	0.94191	0.08607	11.61893	0.08107	12.33556	5.44057	12
13	1.06699	0.93722	0.07964	12.55615	0.07464	13.39724	5.93018	13
14	1.07232	0.93256	0.07414	13.48871	0.06914	14.46423	6.41896	14
15	1.07768	0.92792	0.06936	14.41862	0.06436	15.53655	6.90691	15
16	1.08307	0.92330	0.06619	15.33993	0.06019	16.61423	7.39403	16
17	1.08849	0.91871	0.06151	16.25863	0.05651	17.69730	7.88031	17
18	1.09393	0.91414	0.05823	17.17277	0.05323	18.78579	8.36577	18
19	1.09940	0.90959	0.05530	18.08236	0.05030	19.87972	8.85040	19
20	1.10490	0.90506	0.05267	18.98742	0.04767	20.97912	9.33419	20
21	1.11042	0.90056	0.05028	19.88798	0.04528	22.08401	9.81716	21
22	1.11597	0.89608	0.04811	20.78406	0.04311	23.19443	10.29929	22
23	1.12155	0.89162	0.04613	21.67568	0.04113	24.31040	10.78060	23
24	1.12716	0.88719	0.04432	22.56287	0.03932	25.43196	11.26107	24
25	1.13280	0.88277	0.04265	23.44564	0.03765	26.55912	11.74072	25
26	1.13846	0.87838	0.04111	24.32402	0.03611	27.69191	12.21953	26
27	1.14415	0.87401	0.03969	25.19803	0.03469	28.83037	12.69751	27
28	1.14987	0.86966	0.03836	26.06769	0.03336	29.97452	13.17467	28
29	1.15562	0.86533	0.03713	26.93302	0.03213	31.12439	13.65099	29
30	1.16140	0.86103	0.03698	27.79405	0.03098	32.28002	14.12649	30
31	1.16721	0.85675	0.03490	28.65080	0.02990	33.44142	14.60116	31
32	1.17304	0.85248	0.03369	29.50328	0.02889	34.60662	15.07499	32
33	1.17891	0.84824	0.03295	30.36153	0.02795	35.78167	15.54800	33
34	1.18480	0.84402	0.03206	31.19555	0.02706	36.96058	16.02018	34
35	1.19073	0.83982	0.03122	32.03537	0.02622	38.14538	16.49153	35
40	1.22079	0.81914	0.02765	36.17223	0.02265	44.15885	18.83585	40
45	1.25162	0.79896	0.02487	40.20720	0.01987	50.32416	21.15947	45
50	1.28223	0.77929	0.02265	44.14279	0.01765	56.64516	23.46242	50
55	1.31563	0.76009	0.02084	47.98145	0.01584	63.12577	25.74471	55
60	1.34885	0.74137	0.01933	51.72556	0.01433	69.77003	28.00638	60
65	1.38291	0.72311	0.01806	55.37746	0.01306	76.58206	30.24745	65
70	1.41783	0.70630	0.01697	58.93942	0.01197	83.56611	32.46796	70
75	1.45363	0.68793	0.01602	62.41366	0.01102	90.72660	34.66794	75
80	1.49034	0.67098	0.01520	65.60231	0.01020	98.06771	36.84742	80
85	1.52797	0.65446	0.01447	69.10750	0.00947	105.59430	39.00646	85
90	1.56655	0.63834	0.01383	72.33130	0.00883	113.31094	41.14506	90
95	1.60611	0.62262	0.01325	75.47569	0.00825	121.22243	43.26333	95
100	1.64667	0.60729	0.01273	78.54264	0.00773	129.33370	45.36126	100

1% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	
	(F/P, 1%, N)	(P/F, 1%, N)	(A/P, 1%, N)	(P/A, 1%, N)	(A/F, 1%, N)	(F/A, 1%, N)	
1	1.01000	0.99010	1.01000	0.99010	1.00000	1.00000	1
2	1.02010	0.98030	1.02010	0.98030	1.01000	1.049751	2
3	1.03030	0.97059	1.03030	0.97059	1.02010	1.09337	3
4	1.04060	0.96098	1.04060	0.96098	1.03030	1.14756	4
5	1.05101	0.95147	1.05101	0.95147	1.04060	1.20801	5
6	1.06152	0.94205	1.06152	0.94205	1.05101	1.27096	6
7	1.07214	0.93272	1.07214	0.93272	1.06152	1.33620	7
8	1.08286	0.92348	1.08286	0.92348	1.07214	1.40477	8
9	1.09369	0.91434	1.09369	0.91434	1.08286	1.47337	9
10	1.10462	0.90529	1.10462	0.90529	1.09369	1.54221	10
11	1.11557	0.89632	1.11557	0.89632	1.10462	1.61202	11
12	1.12683	0.88745	1.12683	0.88745	1.11557	1.68250	12
13	1.13809	0.87866	1.13809	0.87866	1.12683	1.75200	13
14	1.14947	0.86996	1.14947	0.86996	1.13809	1.82145	14
15	1.16097	0.86135	1.16097	0.86135	1.14947	1.89135	15
16	1.17256	0.85282	1.17256	0.85282	1.16097	1.96135	16
17	1.18430	0.84438	1.18430	0.84438	1.17256	2.03135	17
18	1.19615	0.83602	1.19615	0.83602	1.18430	2.10135	18
19	1.20811	0.82774	1.20811	0.82774	1.19615	2.17135	19
20	1.22019	0.81954	1.22019	0.81954	1.20811	2.24135	20
21	1.23239	0.81143	1.23239	0.81143	1.22019	2.31135	21
22	1.24472	0.80340	1.24472	0.80340	1.23239	2.38135	22
23	1.25716	0.79544	1.25716	0.79544	1.24472	2.45135	23
24	1.26973	0.78757	1.26973	0.78757	1.25716	2.52135	24
25	1.28243	0.77977	1.28243	0.77977	1.26973	2.59135	25
26	1.29626	0.77205	1.29626	0.77205	1.28243	2.66135	26
27	1.30821	0.76440	1.30821	0.76440	1.29626	2.73135	27
28	1.32129	0.75684	1.32129	0.75684	1.30821	2.8013	

$1\frac{1}{2}\%$  interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N	
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor		
	(F/P, 1½%, N)	(P/F, 1½%, N)	(A/P, 1½%, N)	(P/A, 1½%, N)	(A/F, 1½%, N)	(F/A, 1½%, N)	(A/G, 1½%, N)	
1	1.01500	0.98622	1.01500	0.98622	1.00000	0.00000	1	
2	1.03023	0.97066	0.51128	1.95588	0.49628	2.01500	0.49628	2
3	1.04568	0.96632	0.34338	2.91220	0.32838	3.04523	0.99007	3
4	1.06136	0.94218	0.25944	3.86438	0.24444	4.09090	1.48139	4
5	1.07728	0.92826	0.20909	4.78264	0.19409	5.15227	1.97023	5
6	1.09344	0.91454	0.17553	5.69719	0.16053	6.22955	2.45658	6
7	1.10984	0.90103	0.15156	6.59821	0.13666	7.32299	2.94046	7
8	1.12649	0.88771	0.13358	7.48593	0.11858	8.43284	3.42185	8
9	1.14339	0.87459	0.11961	8.36062	0.10461	9.55933	3.90077	9
10	1.16054	0.86167	0.10843	9.22218	0.09343	10.70272	4.37721	10
11	1.17795	0.84893	0.09929	10.07112	0.08429	11.86326	4.85118	11
12	1.19562	0.83639	0.09168	10.90751	0.07668	13.04121	5.32267	12
13	1.21355	0.82403	0.08624	11.73153	0.07024	14.23683	5.79169	13
14	1.23176	0.81185	0.07972	12.54338	0.06472	15.45038	6.25824	14
15	1.25023	0.79985	0.07494	13.34323	0.05994	16.68214	6.72231	15
16	1.26899	0.78803	0.07077	14.13126	0.05577	17.93237	7.18392	16
17	1.28802	0.77639	0.06708	14.90765	0.05208	19.20136	7.64306	17
18	1.30734	0.76491	0.06381	15.67256	0.04881	20.48938	8.09973	18
19	1.32695	0.75361	0.06088	16.42617	0.04588	21.79672	8.55394	19
20	1.34686	0.74247	0.05825	17.16864	0.04325	23.12367	9.00569	20
21	1.36706	0.73150	0.05587	17.90014	0.04087	24.47052	9.45497	21
22	1.38756	0.72069	0.05370	18.62082	0.03670	25.83758	9.90180	22
23	1.40838	0.71004	0.05173	19.33086	0.03673	27.22514	10.34618	23
24	1.42950	0.69954	0.04992	20.03041	0.03492	28.63352	10.78810	24
25	1.45095	0.68921	0.04826	20.71961	0.03326	30.06302	11.22758	25
26	1.47271	0.67902	0.04673	21.39863	0.03173	31.51397	11.66460	26
27	1.49480	0.66899	0.04532	22.06762	0.03032	32.98668	12.09918	27
28	1.51722	0.65910	0.04400	22.72672	0.02900	34.48148	12.53132	28
29	1.53996	0.64936	0.04278	23.37608	0.02778	35.99670	12.96102	29
30	1.56308	0.63976	0.04164	24.01584	0.02664	37.53868	13.38829	30
31	1.58653	0.63031	0.04057	24.64615	0.02557	39.10176	13.81312	31
32	1.61032	0.62099	0.03958	25.26714	0.02458	40.68829	14.23553	32
33	1.63448	0.61182	0.03864	25.87895	0.02364	42.29861	14.65550	33
34	1.65900	0.60277	0.03776	26.48173	0.02276	43.93309	15.07306	34
35	1.68388	0.59387	0.03693	27.07559	0.02193	45.59209	15.48820	35
40	1.81402	0.56126	0.03343	29.91585	0.01843	54.26789	17.52773	40
45	1.96421	0.51171	0.03072	32.55234	0.01572	63.61420	19.50739	45
50	2.10624	0.47500	0.02857	34.99969	0.01357	73.68283	21.42772	50
55	2.26794	0.44093	0.02683	37.27147	0.01183	84.52960	23.28936	55
60	2.44322	0.40930	0.02539	39.38027	0.01039	96.21465	25.09296	60
65	2.63204	0.37993	0.02419	41.33779	0.00919	108.80277	26.83925	65
70	2.83546	0.35268	0.02317	43.15487	0.00817	122.36375	28.52901	70
75	3.06459	0.32738	0.02230	44.84160	0.00730	136.97278	30.16306	75
80	3.29086	0.30389	0.02155	46.40732	0.00655	152.71085	31.74228	80
85	3.54498	0.28209	0.02089	47.86072	0.00589	169.66523	33.26756	85
90	3.81896	0.26185	0.02032	49.20985	0.00532	187.92990	34.73987	90
95	4.11409	0.24307	0.01982	50.46220	0.00482	207.60614	36.16018	95
100	4.43206	0.22563	0.01937	51.62470	0.00437	228.80304	37.52953	100

## DISCRETE COMPOUNDING INTEREST FACTORS

2% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	
	(F/P, 2%, N)	(P/F, 2%, N)	(A/P, 2%, N)	(P/A, 2%, N)	(A/F, 2%, N)	(F/A, 2%, N)	
1	1.02000	0.98039	1.02000	0.98039	1.00000	1.00000	0.00000
2	1.04040	0.96117	0.51505	1.94156	0.49505	2.02000	0.49505
3	1.06121	0.94232	0.34675	2.88388	0.32675	3.06040	0.98680
4	1.08243	0.92385	0.26262	3.80773	0.24262	4.12161	1.47625
5	1.10408	0.90573	0.21216	4.71346	0.19216	5.20404	1.96040
6	1.12616	0.88797	0.17853	5.60143	0.15853	6.30612	2.44226
7	1.14869	0.87056	0.15451	6.47199	0.13451	7.43428	2.92082
8	1.17166	0.85349	0.13651	7.32548	0.11651	8.58297	3.39608
9	1.19509	0.83676	0.12252	8.16224	0.10252	9.75463	3.86805
10	1.21899	0.82035	0.11133	8.96259	0.09133	10.94972	4.33674
11	1.24337	0.80426	0.10218	9.78685	0.08218	12.16872	4.80213
12	1.26824	0.78849	0.09456	10.57534	0.07456	13.41209	5.26424
13	1.29361	0.77303	0.08612	11.34837	0.06812	14.68033	5.72307
14	1.31948	0.75788	0.08260	12.10625	0.06260	15.97394	6.17862
15	1.34587	0.74301	0.07783	12.84926	0.05783	17.29342	6.63090
16	1.37279	0.72845	0.07385	13.57771	0.05385	18.83929	7.07990
17	1.40024	0.71416	0.06997	14.29187	0.04997	20.01207	7.52564
18	1.42825	0.70016	0.06670	14.99203	0.04670	21.41231	7.96811
19	1.45681	0.68643	0.06378	15.67846	0.04378	22.84056	8.40732
20	1.48595	0.67297	0.06116	16.35143	0.04116	24.29737	8.84328
21	1.51567	0.65978	0.05878	17.01121	0.03878	25.78332	9.27599
22	1.54596	0.64684	0.05663	17.65805	0.03663	27.29698	9.70546
23	1.57690	0.63416	0.05467	18.29220	0.03467	28.84496	10.13169
24	1.60844	0.62172	0.05287	18.91393	0.03287	30.42186	10.55468
25	1.64061	0.60963	0.05122	19.52346	0.03122	32.03030	10.97445
26	1.67342	0.59758	0.04970	20.12104	0.02970	33.67091	11.39100
27	1.70639	0.585					

2½% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	
	(F/P, 2½%, N)	(P/F, 2½%, N)	(A/P, 2½%, N)	(P/A, 2½%, N)	(A/F, 2½%, N)	(F/A, 2½%, N)	
1	1.02500	0.97561	1.02500	0.97561	1.00000	0.00000	1
2	1.05063	0.96181	0.51883	1.92742	0.49383	2.02500	2
3	1.07689	0.92860	0.36014	2.86602	0.32514	3.07563	3
4	1.10381	0.90595	0.26682	3.76197	0.24062	4.15252	4
5	1.13141	0.88385	0.21525	4.64583	0.19025	5.25633	5
6	1.15969	0.86230	0.18155	5.50813	0.15665	6.38774	6
7	1.18869	0.84127	0.15750	6.34939	0.13250	7.54743	7
8	1.21840	0.82075	0.13947	7.17014	0.11447	8.73612	8
9	1.24886	0.80073	0.12546	7.97087	0.10046	9.95452	9
10	1.28008	0.78120	0.11426	8.75206	0.08926	11.20338	10
11	1.31209	0.76214	0.10511	9.51421	0.08011	12.48347	11
12	1.34489	0.74356	0.09749	10.25776	0.07249	13.79555	12
13	1.37861	0.72642	0.09105	10.98318	0.06605	15.14044	13
14	1.41297	0.70773	0.08654	11.69091	0.06054	16.51895	14
15	1.44630	0.69047	0.08077	12.38138	0.05677	17.93193	15
16	1.48451	0.67362	0.07660	13.05600	0.05160	19.38022	16
17	1.52162	0.65720	0.07293	13.71220	0.04793	20.86473	17
18	1.56986	0.64117	0.06967	14.35336	0.04467	22.38635	18
19	1.59865	0.62553	0.06676	14.97889	0.04176	23.94601	19
20	1.63862	0.61027	0.06415	15.58916	0.03915	25.54466	20
21	1.67958	0.59639	0.06179	16.18455	0.03679	27.18327	21
22	1.72157	0.58096	0.05966	16.76541	0.03466	28.86286	22
23	1.76461	0.56670	0.05770	17.33211	0.03270	30.58443	23
24	1.80873	0.55288	0.05591	17.88499	0.03091	32.34904	24
25	1.85394	0.53939	0.05428	18.42438	0.02928	34.15776	25
26	1.90029	0.52623	0.05277	18.95061	0.02777	36.01171	26
27	1.94780	0.51340	0.05138	19.46401	0.02638	37.91200	27
28	1.99650	0.50088	0.05009	19.96489	0.02509	39.86980	28
29	2.04641	0.48866	0.04889	20.45355	0.02389	41.85630	29
30	2.09757	0.47674	0.04778	20.93029	0.02278	43.90270	30
31	2.15001	0.46511	0.04674	21.39541	0.02174	46.00027	31
32	2.20376	0.45377	0.04577	21.84918	0.02077	48.15028	32
33	2.25885	0.44270	0.04486	22.29188	0.01986	50.35403	33
34	2.31532	0.43191	0.04401	22.72379	0.01901	52.61289	34
35	2.37321	0.42137	0.04321	23.14516	0.01821	54.92821	35
40	2.68506	0.37243	0.03984	25.10278	0.01484	67.40255	40
45	3.03790	0.32917	0.03727	26.83302	0.01227	81.51613	45
50	3.43711	0.29094	0.03526	28.36231	0.01026	97.48436	50
55	3.88877	0.25715	0.03366	29.71398	0.00866	115.55092	55
60	4.39979	0.22728	0.03235	30.90866	0.00735	135.99159	60
65	4.97796	0.20089	0.03128	31.96458	0.00628	159.11833	65
70	5.63210	0.17755	0.03040	32.89786	0.00540	185.28411	70
75	6.37721	0.15693	0.02965	33.72274	0.00465	214.88830	75
80	7.20967	0.13870	0.02903	34.45182	0.00403	248.36271	80
85	8.15696	0.12259	0.02849	35.09621	0.00349	286.27857	85
90	9.22886	0.10836	0.02804	35.66577	0.00304	329.15425	90
95	10.44160	0.09577	0.02765	36.16917	0.00265	377.66415	95
100	11.81372	0.08465	0.02731	36.61411	0.00231	432.54865	100

## DISCRETE COMPOUNDING INTEREST FACTORS

3% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	
	(F/P, 3%, N)	(P/F, 3%, N)	(A/P, 3%, N)	(P/A, 3%, N)	(A/F, 3%, N)	(F/A, 3%, N)	
1	1.03000	0.97087	1.03000	0.97087	1.00000	1.00000	1
2	1.06090	0.94260	0.52261	1.91347	0.49261	2.03000	2
3	1.09273	0.91514	0.35353	2.82861	0.32353	3.09090	3
4	1.12551	0.88849	0.26903	3.71710	0.23903	4.18363	4
5	1.15927	0.86261	0.21835	4.57971	0.18835	5.30914	5
6	1.19405	0.83748	0.18460	5.41719	0.15460	6.46841	6
7	1.22987	0.81309	0.16051	6.23028	0.13051	7.66246	7
8	1.26677	0.78941	0.14246	7.01969	0.11246	8.89234	8
9	1.30477	0.76642	0.12843	7.78611	0.09843	10.15911	9
10	1.34392	0.74409	0.11723	8.53020	0.08723	11.46388	10
11	1.38423	0.72242	0.10808	9.25262	0.07808	12.80780	11
12	1.42576	0.70138	0.10046	9.95400	0.07046	14.19203	12
13	1.46853	0.68095	0.09403	10.63496	0.06403	15.61779	13
14	1.51259	0.66112	0.08853	11.29607	0.05853	17.08632	14
15	1.55797	0.64186	0.08377	11.93794	0.05377	18.59891	15
16	1.60471	0.62317	0.07961	12.56110	0.04961	20.15688	16
17	1.65285	0.60502	0.07595	13.16612	0.04595	21.76159	17
18	1.70243	0.58739	0.07271	13.75351	0.04271	23.41444	18
19	1.75351	0.57029	0.06961	14.32380	0.03961	25.11687	19
20	1.80611	0.55368	0.06722	14.87747	0.03722	26.87037	20
21	1.86029	0.53755	0.06487	15.41502	0.03487	28.67649	21
22	1.91610	0.52189	0.06275	15.93692	0.03275	30.53678	22
23	1.97359	0.50669	0.06081	16.44361	0.03081	32.45288	23
24	2.03279	0.49193	0.05905	16.93554	0.02905	34.42647	24
25	2.09378	0.47761	0.05743	17.41315	0.02743	36.45926	25
26	2.15659	0.46369	0.05594	17.87684	0.02594	38.55304	26
27	2.22129	0.45019	0.05456	18.32703	0.02456	40.70963	27
28	2.28793	0.43708	0.05329	18.76411	0.02329	42.93092	28
29	2.35657	0.42435	0.05211	19.18845	0.02211	45.21885	29
30	2.42726	0.41199	0.05102	19.60044	0.02102	47.57542	30
31	2.50008	0.39999	0.06000	20.00043	0.02000	50.00268	31
32	2.57506	0.38834	0.04905	20.38877	0.01905	52.50276	32
33	2.65234	0.37703	0.04816	20.76579	0.01816	55.07784	33
34	2.73191	0.36604	0.04732	21.13184	0.01732	57.73018	34
35	2.81386	0.35538	0.04654	21.48722	0.01654	60.46208	3

4% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	N	
	(F/P,4,N)	(P/F,4,N)	(A/P,4,N)	(P/A,4,N)	(F/A,4,N)	(A/G,4,N)									
1	1.04000	0.96154	1.04000	0.96154	1.00000	0.00000	1								
2	1.08160	0.92456	0.53020	0.89609	0.49020	2.04000	0.49020	2							
3	1.12486	0.88900	0.36035	2.77609	0.32035	3.12160	0.97386	3							
4	1.16986	0.85480	0.27549	3.62990	0.23549	4.24646	1.45100	4							
5	1.21666	0.82193	0.22463	4.45182	0.18463	5.41632	1.92161	5							
6	1.26632	0.79031	0.19076	5.24214	0.15076	6.63296	2.38571	6							
7	1.31593	0.75992	0.16661	6.00205	0.12661	7.89829	2.84332	7							
8	1.36857	0.73069	0.14853	6.73274	0.10853	9.21423	3.29443	8							
9	1.42331	0.70259	0.13449	7.43533	0.09449	10.58280	3.73908	9							
10	1.48024	0.67566	0.12329	8.11090	0.08329	12.00611	4.17726	10							
11	1.53945	0.64958	0.11415	8.76048	0.07415	13.48635	4.60901	11							
12	1.60103	0.62460	0.10665	9.38507	0.06665	15.02581	5.03435	12							
13	1.66607	0.60067	0.10014	9.98665	0.06014	16.62684	5.45329	13							
14	1.73168	0.57748	0.09467	10.56312	0.05467	18.29191	5.86586	14							
15	1.80094	0.55526	0.08994	11.11839	0.04994	20.02359	6.27209	15							
16	1.87298	0.53391	0.08682	11.66230	0.04582	21.82453	6.67200	16							
17	1.94790	0.51337	0.08220	12.16567	0.04220	23.69751	7.06663	17							
18	2.02582	0.49363	0.07899	12.65930	0.03899	26.64541	7.45300	18							
19	2.10686	0.47464	0.07614	13.13394	0.03614	27.67123	7.83416	19							
20	2.19112	0.45639	0.07358	13.59033	0.03358	29.77808	8.20912	20							
21	2.27877	0.43883	0.07128	14.02916	0.03128	31.96920	8.57794	21							
22	2.36992	0.42196	0.06920	14.45112	0.02920	34.24797	8.94065	22							
23	2.46472	0.40573	0.06731	14.85684	0.02731	36.61789	9.29729	23							
24	2.56330	0.39012	0.06559	15.24696	0.02559	39.08260	9.64790	24							
25	2.66584	0.37512	0.06401	15.62208	0.02401	41.64591	9.99252	25							
26	2.77247	0.36069	0.06257	15.98277	0.02257	44.31174	10.33120	26							
27	2.88337	0.34682	0.06124	16.32969	0.02124	47.08421	10.66399	27							
28	2.99870	0.33348	0.06001	16.66306	0.02001	49.96758	10.99092	28							
29	3.11885	0.32065	0.05888	16.98371	0.01888	52.96629	11.31205	29							
30	3.24340	0.30832	0.05783	17.29203	0.01783	56.06494	11.62743	30							
31	3.37313	0.29646	0.05686	17.58849	0.01686	59.32834	11.93710	31							
32	3.50806	0.28506	0.05596	17.87355	0.01595	62.70147	12.24113	32							
33	3.64838	0.27409	0.06510	18.14765	0.01510	66.20953	12.53956	33							
34	3.79432	0.26365	0.05431	18.41120	0.01431	69.86791	12.83244	34							
35	3.94609	0.25342	0.05358	18.66461	0.01358	73.65222	13.11984	35							
40	4.80102	0.20829	0.05062	19.79277	0.01052	95.02652	14.47651	40							
45	5.84118	0.17120	0.04826	20.72004	0.00826	121.02939	15.70474	45							
50	7.10668	0.14071	0.04665	21.48218	0.00655	152.66708	16.81225	50							
55	8.64637	0.11566	0.04523	22.10861	0.00523	191.15917	17.80704	55							
60	10.61963	0.09606	0.04420	22.62349	0.00420	237.99069	18.69723	60							
65	12.79874	0.07813	0.04339	23.04668	0.00339	294.96838	19.49093	65							
70	15.57162	0.06422	0.04276	23.39451	0.00275	364.29046	20.19614	70							
75	18.94525	0.06278	0.04223	23.68041	0.00223	448.63137	20.82062	75							
80	23.04980	0.04338	0.04181	23.91539	0.00181	551.24498	21.37185	80							
85	28.04380	0.03566	0.04148	24.10653	0.00148	676.09012	21.85693	85							
90	34.11933	0.02931	0.04121	24.26728	0.00121	827.98333	22.28255	90							
95	41.51139	0.02409	0.04099	24.39776	0.00099	1012.78465	22.65498	95							
100	50.50496	0.01980	0.04081	24.50500	0.00081	1237.62370	22.98000	100							

5% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	N	
	(F/P,5,N)	(P/F,5,N)	(A/P,5,N)	(P/A,5,N)	(F/A,5,N)	(A/G,5,N)									
1	1.05000	0.95238	1.05000	0.95238	1.00000	0.00000	1								
2	1.10250	0.90703	0.53780	0.86384	2.04000	0.48780	2								
3	1.15763	0.86384	0.36721	0.83719	3.12160	0.31721	3								
4	1.21551	0.82270	0.28201	0.79863	4.24646	0.23097	4								
5	1.27628	0.78353	0.23097	0.75569	5.41632	0.18097									

6% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 6%, N)	(P/F, 6%, N)	(A/P, 6%, N)	(P/A, 6%, N)	(A/F, 6%, N)	(A/G, 6%, N)		
1	1.06000	0.94340	1.06000	0.94340	1.00000	0.00000	1	
2	1.12360	0.89000	0.54544	1.83339	0.48544	2.06000	0.48544	2
3	1.19102	0.83962	0.37411	2.67301	0.31411	3.18360	0.96118	3
4	1.26248	0.79209	0.28859	3.46511	0.22859	4.37462	1.42723	4
5	1.33823	0.74726	0.23740	4.21236	0.17740	5.63709	1.88363	5
6	1.41862	0.70496	0.20336	4.91732	0.14336	6.97532	2.33040	6
7	1.50363	0.66506	0.17914	5.58238	0.11914	8.39384	2.76758	7
8	1.59385	0.62741	0.16104	6.20979	0.10104	9.89747	3.19521	8
9	1.68948	0.59190	0.14702	6.80169	0.08702	11.49132	3.61333	9
10	1.79085	0.55839	0.13587	7.36009	0.07587	13.18079	4.02201	10
11	1.89830	0.52679	0.12679	7.88687	0.06679	14.97164	4.42129	11
12	2.01220	0.49697	0.11928	8.38384	0.05928	16.86994	4.81126	12
13	2.13293	0.46884	0.11296	8.86268	0.05296	18.88214	5.19198	13
14	2.26090	0.44230	0.10758	9.29498	0.04758	21.01507	5.56352	14
15	2.39666	0.41727	0.10296	9.71225	0.04296	23.27597	5.92598	15
16	2.54035	0.39366	0.09895	10.10590	0.03895	25.67253	6.27943	16
17	2.69277	0.37136	0.09544	10.47726	0.03544	28.21288	6.62397	17
18	2.85434	0.35034	0.09236	10.82760	0.03236	30.90565	6.96970	18
19	3.02560	0.33051	0.08962	11.15812	0.02962	33.75999	7.28673	19
20	3.20714	0.31180	0.08718	11.46992	0.02718	36.78559	7.60515	20
21	3.39956	0.29416	0.08500	11.76408	0.02500	39.99273	7.91508	21
22	3.60354	0.27751	0.08305	12.04158	0.02305	43.39229	8.21662	22
23	3.81975	0.26180	0.08128	12.30338	0.02128	46.99583	8.50991	23
24	4.04893	0.24698	0.07968	12.55036	0.01968	50.81558	8.79506	24
25	4.29187	0.23300	0.07823	12.78336	0.01823	54.86451	9.07220	25
26	4.54938	0.21981	0.07690	13.00317	0.01690	59.15638	9.34145	26
27	4.82235	0.20737	0.07570	13.21053	0.01570	63.70577	9.60294	27
28	5.11169	0.19563	0.07459	13.40616	0.01459	68.52811	9.86681	28
29	5.41839	0.18456	0.07358	13.59072	0.01358	73.63980	10.10319	29
30	5.74349	0.17411	0.07285	13.76483	0.01266	79.06819	10.34221	30
31	6.08810	0.16425	0.07179	13.92909	0.01179	84.80168	10.57402	31
32	6.45339	0.15496	0.07100	14.08404	0.01100	90.88978	10.79675	32
33	6.84069	0.14619	0.07027	14.23023	0.01027	97.34316	11.01655	33
34	7.25103	0.13791	0.06960	14.36814	0.00960	104.18375	11.22756	34
35	7.68609	0.13011	0.06897	14.49825	0.00897	111.43478	11.43192	35
40	10.28672	0.09722	0.06640	15.04630	0.00646	154.76197	12.35898	40
45	13.76461	0.07265	0.06470	15.45583	0.00470	212.74351	13.14129	45
50	18.42015	0.05429	0.06344	15.76186	0.00344	290.33590	13.79643	50
55	24.65032	0.04057	0.06254	15.99054	0.00254	394.17203	14.34112	55
60	32.98769	0.03031	0.06188	16.16143	0.00188	533.12818	14.79095	60
65	44.14497	0.02285	0.06139	16.28912	0.00139	719.06286	15.16012	65
70	59.07593	0.01693	0.06103	16.38454	0.00103	967.93217	15.46135	70
75	79.05692	0.01265	0.06077	16.45585	0.00077	1300.94868	15.70583	75
80	105.79599	0.00945	0.06057	16.50913	0.00057	1746.59989	15.90328	80
85	141.57890	0.00706	0.06043	16.54895	0.00043	2342.98174	16.06202	85
90	189.46451	0.00528	0.06032	16.57870	0.00032	3141.07519	16.18912	90
95	253.54625	0.00394	0.06024	16.60093	0.00024	4209.10425	16.29060	95
100	339.30206	0.00295	0.06018	16.61755	0.00018	5638.36806	16.37107	100

7% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 7%, N)	(P/F, 7%, N)	(A/P, 7%, N)	(P/A, 7%, N)	(A/F, 7%, N)	(A/G, 7%, N)		
1	1.07000	0.93458	1.07000	0.93458	1.00000	1.00000	0.00000	1
2	1.14490	0.87344	1.05309	1.80802	0.48309	2.07000	0.48309	2
3	1.22504	0.81630	1.03105	2.62432	0.31105	3.21490	0.96493	3
4	1.31080	0.76290	1.02623	3.38721	0.22623	4.43994	1.41554	4
5	1.40255	0.71299	1.02438	4.10020	0.17389	5.75074	1.86496	5
6	1.50073	0.66634	1.02098	4.76654	0.13980	7.15329	2.30322	6
7	1.60578	0.62275	1.01855	5.38929	0.11555	8.66402	2.73039	7
8	1.71819	0.58201	1.01674	5.97130	0.09747	10.25980	3.14654	8
9	1.83846	0.54393	1.01534	6.51523	0.08349	11.97799	3.55174	9
10	1.96715	0.50835	1.01423	7.02368	0.07238	13.81645	3.94607	10
11	2.10485	0.47509	1.01336	7.49867	0.06336	15.78360	4.32963	11
12	2.26219	0.44401	1.01259	7.94269	0.05690	17.88845	4.70252	12
13	2.40986	0.41496	1.01196	8.35765	0.04965	20.14064	5.06484	13
14	2.57853	0.38782	1.01143	8.74547	0.04434	22.55049	5.41673	14
15	2.75903	0.36245	1.01097	9.10791	0.03979	25.12902	5.75829	15
16	2.95216	0.33873	1.01068	9.44666	0.03586	27.88805	6.08968	16
17	3.15882	0.31657	1.01024	9.76322	0.03243	30.84022	6.41102	17
18	3.37993	0.29666	1.00941	10.05909	0.02941	33.99903	6.72247	18
19	3.61653	0.27651	1.00867	10.33560	0.02675	37.37896	7.02418	19
20	3.86968	0.25842	1.00749	10.59401	0.02439	40.99549	7.31631	20
21	4.14056	0.24151	1.00622	10.83553	0.02229	44.86518	7.59901	21
22	4.43040	0.22671	1.00504	11.06124	0.02041	49.00574	7.87247	22
23	4.74053	0.21095	1.00387	11.27219	0.01871	53.43614	8.13685	23
24	5.07237	0.19715	1.00271	11.46933	0.01719	58.17667	8.39234	24
25	5.42743	0.18425						

8% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 8%, N)	(P/F, 8%, N)	(A/P, 8%, N)	(P/A, 8%, N)	(A/F, 8%, N)	(F/A, 8%, N)	(A/G, 8%, N)	
1	1.08000	0.92593	1.08000	0.92593	1.00000	1.00000	0.00000	1
2	1.16640	0.85734	0.56077	1.78326	0.48077	2.08000	0.48077	2
3	1.25971	0.79363	0.38803	2.57710	0.30803	3.24640	0.94874	3
4	1.36049	0.73503	0.30192	3.31213	0.22192	4.50611	1.40396	4
5	1.46933	0.68068	0.25046	3.99271	0.17046	5.86660	1.84647	5
6	1.58687	0.63017	0.21632	4.62288	0.13632	7.33593	2.27635	6
7	1.71382	0.58349	0.19207	5.20637	0.11207	8.92280	2.69366	7
8	1.85093	0.54027	0.17401	5.74664	0.09401	10.63663	3.09852	8
9	1.99900	0.50025	0.16008	6.24689	0.08008	12.48756	3.49103	9
10	2.15892	0.46319	0.14903	6.71008	0.06903	14.48656	3.87131	10
11	2.33164	0.42888	0.14006	7.13896	0.06008	16.64549	4.23950	11
12	2.51817	0.39711	0.13270	7.53608	0.05270	18.97713	4.59575	12
13	2.71962	0.36770	0.12652	7.90378	0.04652	21.49530	4.94021	13
14	2.93719	0.34046	0.12130	8.24424	0.04130	24.21492	5.27305	14
15	3.17217	0.31524	0.11683	8.55948	0.03683	27.15211	5.59446	15
16	3.42594	0.29189	0.11298	8.86137	0.03298	30.32428	5.90463	16
17	3.70002	0.27027	0.10963	9.12164	0.02963	33.75023	6.20375	17
18	3.99602	0.25025	0.10670	9.37189	0.02670	37.45024	6.49203	18
19	4.31570	0.23171	0.10413	9.60360	0.02413	41.44626	6.76969	19
20	4.66096	0.21455	0.10185	9.81815	0.02185	45.76196	7.03695	20
21	5.03383	0.19866	0.09983	10.01680	0.01983	50.42292	7.29403	21
22	5.43664	0.18394	0.09803	10.20074	0.01803	55.45676	7.54118	22
23	5.87146	0.17032	0.09642	10.37106	0.01642	60.89330	7.77863	23
24	6.34118	0.15770	0.09498	10.52876	0.01498	66.76476	8.00661	24
25	6.84848	0.14602	0.09368	10.67478	0.01368	73.10594	8.22538	25
26	7.39635	0.13520	0.09251	10.80998	0.01251	79.95442	8.43518	26
27	7.98806	0.12519	0.09145	10.93516	0.01145	87.35077	8.63627	27
28	8.62711	0.11591	0.09049	11.05108	0.01049	95.33883	8.82888	28
29	9.31727	0.10733	0.08962	11.15841	0.00962	103.96594	9.01328	29
30	10.06266	0.09938	0.08883	11.25778	0.00883	113.28321	9.18971	30
31	10.86767	0.09202	0.08811	11.34980	0.00811	123.34587	9.35843	31
32	11.73708	0.08620	0.08745	11.43500	0.00745	134.21354	9.51967	32
33	12.67605	0.07889	0.08685	11.51389	0.00685	145.95062	9.67370	33
34	13.69013	0.07305	0.08630	11.58693	0.00630	158.62867	9.82075	34
35	14.78534	0.06763	0.08580	11.65457	0.00580	172.31680	9.96107	35
40	21.72452	0.04603	0.08386	11.92461	0.00386	259.05652	10.56992	40
45	31.92045	0.03133	0.08259	12.10840	0.00259	386.50562	11.04465	45
50	46.90161	0.02132	0.08174	12.23348	0.00174	573.77016	11.41071	50
55	68.91386	0.01451	0.08118	12.31861	0.00118	848.92320	11.69015	55
60	101.25706	0.00988	0.08080	12.37655	0.00080	1263.21330	11.90154	60
65	148.77985	0.00672	0.08054	12.41598	0.00054	1847.24808	12.06016	65
70	218.60641	0.00457	0.08037	12.44282	0.00037	2720.08007	12.17832	70
75	321.20453	0.00311	0.08025	12.46108	0.00025	4002.55662	12.26577	75
80	471.95483	0.00212	0.08017	12.47351	0.00017	5886.93543	12.33013	80
85	693.45649	0.00144	0.08012	12.48197	0.00012	8655.70611	12.37725	85
90	1018.91509	0.00098	0.08008	12.48773	0.00008	12723.93862	12.41158	90
95	1497.12056	0.00067	0.08005	12.49165	0.00005	18701.50686	12.43650	95
100	2199.76126	0.00045	0.08004	12.49432	0.00004	27484.51570	12.45452	100

9% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 9%, N)	(P/F, 9%, N)	(A/P, 9%, N)	(P/A, 9%, N)	(A/F, 9%, N)	(F/A, 9%, N)	(A/G, 9%, N)	
1	1.09000	0.91743	1.09000	0.91743	1.00000	1.00000	0.00000	1
2	1.18810	0.84168	0.56847	1.75911	0.47847	2.09000	0.47847	2
3	1.29503	0.77218	0.39605	2.53129	0.30505	3.27810	0.94262	3
4	1.41158	0.70843	0.30867	3.23972	0.21867	4.57313	1.39250	4
5	1.53862	0.64993	0.25709	3.88965	0.16709	5.98471	1.82820	5
6	1.67710	0.59627	0.22292	4.48592	0.13292	7.52333	2.24979	6
7	1.82804	0.54703	0.19869	5.03295	0.10869	9.20043	2.65740	7
8	1.99256	0.50187	0.18067	5.53482	0.09067	11.02847	3.05117	8
9	2.17189	0.46043	0.16680	5.99525	0.07680	13.02104	3.43123	9
10	2.36736	0.42241	0.15582	6.41766	0.06582	15.19293	3.79777	10
11	2.58043	0.38753	0.14696	6.80619	0.05695	17.56029	4.15096	11
12	2.81266	0.35553	0.13965	7.16073	0.04965	20.14072	4.49102	12
13	3.06580	0.32618	0.13357	7.48690	0.04357	22.96338	4.81816	13
14	3.34173	0.29925	0.12843	7.78615	0.03843	24.01919	5.13262	14
15	3.64248	0.27454	0.12406	8.06069	0.03406	29.36092	5.43463	15
16	3.97031	0.25187	0.12030	8.31256	0.03030	33.00340	5.72446	16
17	4.32763	0.23107	0.11705	8.54363	0.02705	36.97370	6.00238	17
18	4.71712	0.21199	0.11421	8.75563	0.02421	41.30134	6.26866	18
19	5.14166	0.19449	0.11173	8.95011	0.02173	46.01846	6.52358	19
20	5.60441	0.17843	0.10955	9.12855	0.01955	51.16012	6.76745	20
21	6.10881	0.16370	0.10762	9.29224	0.01762	56.76453	7.00056	21
22	6.66860	0.15018	0.10590	9.44243	0.01590	62.87334	7.22322	22
23	7.25787	0.13778	0.10438	9.58021	0.01438	69.53194	7.43574	23
24	7.91108	0.12640	0.10302	9.70661				

10% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 10, N)	(P/F, 10, N)	(A/P, 10, N)	(P/A, 10, N)	(A/F, 10, N)	(F/A, 10, N)	(A/G, 10, N)	
1	1.10000	0.90909	1.10000	0.90909	1.00000	0.00000	1	
2	1.21000	0.82645	0.57619	1.73554	0.47619	2.10000	0.47619	2
3	1.33100	0.75131	0.40211	2.48695	0.30211	3.31000	0.93666	3
4	1.46410	0.68301	0.31547	3.16987	0.21547	4.64100	1.38117	4
5	1.61051	0.62092	0.26380	3.79079	0.16380	6.10610	1.81013	5
6	1.77156	0.56447	0.22961	4.35526	0.12961	7.71561	2.22356	6
7	1.94872	0.51316	0.20541	4.86842	0.10541	9.48717	2.62162	7
8	2.14359	0.46651	0.18744	5.33493	0.08744	11.43589	3.00448	8
9	2.35795	0.42410	0.17364	5.75902	0.07364	13.57948	3.37236	9
10	2.69374	0.38654	0.16275	6.14457	0.06275	15.93742	3.72546	10
11	2.85312	0.35049	0.15396	6.49506	0.05396	18.53117	4.06405	11
12	3.13843	0.31863	0.14676	6.81369	0.04676	21.38428	4.38840	12
13	3.45227	0.28966	0.14078	7.10336	0.04078	24.52271	4.69879	13
14	3.79750	0.26333	0.13575	7.36669	0.03575	27.97498	4.99553	14
15	4.17725	0.23939	0.13147	7.60608	0.03147	31.77248	5.27893	15
16	4.59497	0.21763	0.12782	7.82371	0.02782	36.94973	5.54934	16
17	5.06447	0.19784	0.12466	8.02155	0.02466	40.54470	5.80710	17
18	5.56992	0.17906	0.12193	8.20141	0.02193	45.59917	6.05256	18
19	6.11591	0.16351	0.11965	8.36492	0.01955	51.15909	6.29610	19
20	6.72750	0.14864	0.11746	8.51356	0.01746	57.27500	6.50808	20
21	7.40025	0.13513	0.11562	8.64869	0.01562	64.00250	6.71888	21
22	8.14027	0.12285	0.11401	8.77154	0.01401	71.40275	6.91889	22
23	8.95430	0.11168	0.11257	8.88322	0.01257	79.54302	7.10848	23
24	9.84973	0.10153	0.11130	8.98474	0.01130	88.49733	7.28805	24
25	10.83471	0.09230	0.11017	9.07704	0.01017	98.34706	7.45798	25
26	11.91818	0.08391	0.10916	9.16095	0.00916	109.18177	7.61865	26
27	13.10999	0.07628	0.10826	9.23722	0.00826	121.09994	7.77044	27
28	14.42099	0.06934	0.10745	9.30657	0.00745	134.20994	7.91372	28
29	15.86309	0.06304	0.10673	9.36961	0.00673	148.63083	8.04886	29
30	17.44940	0.05731	0.10608	9.42691	0.00608	164.49402	8.17623	30
31	19.19434	0.05210	0.10660	9.47901	0.00660	181.94342	8.29617	31
32	21.11378	0.04736	0.10497	9.52638	0.00497	201.13777	8.40905	32
33	23.22515	0.04306	0.10450	9.56943	0.00450	222.25154	8.51520	33
34	25.54767	0.03914	0.10407	9.60867	0.00407	245.47670	8.61494	34
35	28.10244	0.03558	0.10369	9.64416	0.00369	271.02437	8.70860	35
40	45.25926	0.02209	0.10226	9.77905	0.00226	442.59256	9.09623	40
45	72.89048	0.01372	0.10139	9.86281	0.00139	718.90484	9.37405	45
50	117.39085	0.00862	0.10086	9.91481	0.00086	1163.90863	9.57041	50
55	189.05914	0.00529	0.10053	9.94711	0.00053	1880.59142	9.70754	55
60	304.48164	0.00328	0.10033	9.96716	0.00033	3034.81640	9.80229	60
65	490.37073	0.00204	0.10020	9.97961	0.00020	4893.70725	9.86718	65
70	789.74696	0.00127	0.10013	9.98734	0.00013	7887.46967	9.91125	70
75	1271.89637	0.00079	0.10008	9.99214	0.00008	12708.95371	9.94099	75
80	2048.40021	0.00049	0.10005	9.99612	0.00005	20474.00215	9.96093	80
85	3298.96903	0.00030	0.10003	9.99697	0.00003	32979.69030	9.97423	85
90	5313.02261	0.00019	0.10002	9.99812	0.00002	53120.22612	9.98306	90
95	8656.67605	0.00012	0.10001	9.99883	0.00001	85556.76047	9.98890	95
100	13780.61234	0.00007	0.10001	9.99927	0.00001	137796.12340	9.99274	100

11% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 11, N)	(P/F, 11, N)	(A/P, 11, N)	(P/A, 11, N)	(A/F, 11, N)	(F/A, 11, N)	(A/G, 11, N)	
1	1.11000	0.90090	1.11000	0.90090	1.00000	1.00000	0.00000	1
2	1.23210	0.81162	0.58393	1.71252	0.47393	2.11000	0.47393	2
3	1.36763	0.73118	0.40921	2.44371	0.29921	3.34210	0.93055	3
4	1.51807	0.65873	0.32233	3.10245	0.21233	4.70973	1.36995	4
5	1.686506	0.59345	0.27057	3.69690	0.16057	6.22780	1.79226	5
6	1.87041	0.53464	0.23638	4.23054	0.12638	7.91286	2.19764	6
7	2.07616	0.48166	0.21222	4.71220	0.10222	9.78327	2.58630	7
8	2.30454	0.43393	0.19432	5.14612	0.08432	11.85943	2.95847	8
9	2.56804	0.39092	0.18060	5.53705	0.07060	14.16397	3.31441	9
10	2.83942	0.35218	0.16980	5.88923	0.05980	16.72201	3.65442	10
11	3.15176	0.31728	0.16112	6.20652	0.05112	19.56143	3.97881	11
12	3.49845	0.28584	0.15403	6.49236	0.04403	22.71319	4.28793	12
13	3.88328	0.25751	0.14815	6.74987	0.03815	26.21164	4.58216	13
14	4.31044	0.23199	0.14323	6.98187	0.03323	30.09492	4.86187	14
15	4.78459	0.20900	0.13907	7.19087	0.02907	34.40536	5.12747	15
16	5.31089	0.18829	0.13552	7.37916	0.02552	39.18995	5.37938	16
17	5.89509	0.16963	0.13247	7.54879	0.02247	44.50084	5.61804	17
18	6.54355	0.15282	0.12984	7.70162	0.01984	50.39594	5.84389	18
19	7.26334	0.13768	0.12756	7.83929	0.01756	56.93949	6.05739	19
20	8.06231	0.12403	0.12558	7.96333	0.01558	64.20283	6.25898	20
21	8.94917	0.11174	0.12384	8.07507	0.01384	72.26514	6.44912	21
22	9.93357	0.10067	0.12231	8.17574	0.01231	81.21431	6.62829	22
23	11.02627	0.09069	0.12097	8.26643	0.01097	91.14788	6.79693	23
24	12.23916	0.08170	0.11979	8.34814	0.00979	102.17415		

12% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor									
	(F/P, 12, N)	(P/F, 12, N)	(A/P, 12, N)	(P/A, 12, N)	(A/F, 12, N)	(F/A, 12, N)	(A/G, 12, N)								
1	1.12000	0.89286	1.12000	0.89286	1.00000	1.00000	0.00000	1							
2	1.25440	0.79719	0.59170	1.69005	0.47170	2.12000	0.47170	2							
3	1.40493	0.71178	0.41636	2.40183	0.29635	3.37440	0.92461	3							
4	1.57362	0.63562	0.32923	3.03735	0.20923	4.77933	1.35885	4							
5	1.76234	0.56743	0.27741	3.60478	0.15741	6.36285	1.77459	5							
6	1.97382	0.50663	0.24323	4.11141	0.12323	8.11519	2.17205	6							
7	2.21068	0.45235	0.21912	4.56376	0.09912	10.06901	2.55147	7							
8	2.47596	0.40388	0.20130	4.96764	0.06130	12.29969	2.91314	8							
9	2.77308	0.36061	0.18768	5.32825	0.06768	14.77566	3.25742	9							
10	3.10585	0.32197	0.17698	5.65022	0.06698	17.54874	3.58465	10							
11	3.47855	0.28748	0.16842	5.93770	0.04842	20.66458	3.89625	11							
12	3.89598	0.25668	0.16144	6.19437	0.04144	24.13313	4.18965	12							
13	4.36349	0.22917	0.15568	6.42355	0.03568	28.02911	4.46830	13							
14	4.88711	0.20462	0.15087	6.62817	0.03087	32.39280	4.73169	14							
15	5.47357	0.18270	0.14682	6.81086	0.02682	37.27971	4.98030	15							
16	6.13039	0.16312	0.14339	6.97399	0.02339	42.75328	5.21466	16							
17	6.86804	0.14564	0.14046	7.11963	0.02046	48.88367	5.43530	17							
18	7.68997	0.13004	0.13794	7.24967	0.01794	55.74971	5.64274	18							
19	8.61276	0.11611	0.13576	7.36578	0.01576	63.43968	5.83752	19							
20	9.64629	0.10367	0.13388	7.46944	0.01388	72.06244	6.02020	20							
21	10.80385	0.09256	0.13224	7.56200	0.01224	81.69874	6.19132	21							
22	12.10031	0.08264	0.13081	7.64485	0.01081	92.50258	6.35141	22							
23	13.55235	0.07379	0.12966	7.71843	0.00956	104.60289	6.50101	23							
24	15.17863	0.06588	0.12846	7.78432	0.00846	118.15524	6.64064	24							
25	17.00006	0.05882	0.12750	7.84314	0.00750	133.33387	6.77084	25							
26	19.04007	0.05252	0.12665	7.89566	0.00666	150.33393	6.89210	26							
27	21.32488	0.04689	0.12590	7.94255	0.00590	169.37401	7.00491	27							
28	23.88387	0.04187	0.12524	7.98442	0.00524	190.69889	7.10976	28							
29	26.74993	0.03738	0.12466	8.02181	0.00466	214.58275	7.20712	29							
30	29.96992	0.03338	0.12414	8.05518	0.00414	241.33268	7.29742	30							
31	33.55511	0.02980	0.12369	8.08499	0.00369	271.29261	7.38110	31							
32	37.58173	0.02661	0.12328	8.11159	0.00328	304.84772	7.45858	32							
33	42.09153	0.02376	0.12292	8.13635	0.00292	342.42945	7.53025	33							
34	47.14252	0.02121	0.12260	8.15656	0.00260	384.52098	7.59649	34							
35	52.79962	0.01894	0.12232	8.17550	0.00232	431.66350	7.65765	35							
40	93.06097	0.01075	0.12130	8.24378	0.00130	767.09142	7.89879	40							
45	163.98760	0.00610	0.12074	8.28252	0.00074	1358.23003	8.05724	45							
50	289.00219	0.00346	0.12042	8.30460	0.00042	2400.01825	8.15972	50							

13% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor									
	(F/P, 13, N)	(P/F, 13, N)	(A/P, 13, N)	(P/A, 13, N)	(A/F, 13, N)	(F/A, 13, N)	(A/G, 13, N)								
1	1.13000	0.88496	1.13000	0.88496	1.00000	1.00000	0.00000	1							
2	1.27690	0.78315	0.59948	1.66810	0.46948	2.13000	0.21300	2							
3	1.44290	0.69305	0.42352	2.36115	0.29352	3.40690	0.91872	3							
4	1.63047	0.61332	0.33619	2.97447	0.20619	4.84980	1.34787	4							
5	1.84244	0.54276	0.28431	3.51723	0.15431	6.48027	1.75713	5							
6	2.08195	0.48032	0.25015	3.99755	0.12015	8.32271	2.14677	6							
7	2.35261	0.42506	0.22611	4.42261	0.09611	10.40466	2.51711	7							
8	2.65844	0.37616	0.20839	4.79877	0.07839	12.75726	2.86851	8							
9	3.00404	0.33288	0.19487	5.13166	0.06487	15.41571	3.20138	9							
10	3.39457	0.29459	0.18429	5.42624	0.05429	18.41975	3.51619	10							
11	3.83586	0.26070	0.17584	5.68694	0.04584	21.81432	3.81342	11							
12	4.33452	0.23071	0.16899	5.91766	0.03899	25.66018	4.08359	12							
13	4.89801	0.20416	0.16335	6.12181	0.03										

14% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					GRADIENT SERIES	
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	Present Worth Factor	
	(F/P, 14, N)	(P/F, 14, N)	(A/P, 14, N)	(P/A, 14, N)	(F/A, 14, N)	(A/F, 14, N)	(G/A, 14, N)	(A/G, 14, N)	N
1	1.14000	0.87719	1.14000	0.87719	1.00000	1.00000	0.00000	1	
2	1.29960	0.76947	0.60729	1.64666	0.46729	2.14000	0.46729	2	
3	1.48154	0.67497	0.43073	2.32163	0.29073	3.43960	0.91290	3	
4	1.68696	0.59208	0.34320	2.91371	0.20320	4.92114	1.33701	4	
5	1.92541	0.51937	0.29128	3.43308	0.15128	6.61010	1.73987	5	
6	2.19497	0.45659	0.25716	3.88967	0.11716	8.53562	2.12182	6	
7	2.50227	0.39964	0.23319	4.28830	0.08319	10.73049	2.48324	7	
8	2.85259	0.35056	0.21557	4.63886	0.07557	13.23276	2.82457	8	
9	3.25196	0.30751	0.20217	4.94637	0.06217	16.08535	3.14632	9	
10	3.70722	0.26974	0.19171	5.21612	0.05171	19.33730	3.44903	10	
11	4.22623	0.23662	0.18339	5.45273	0.04339	23.04452	3.73331	11	
12	4.81790	0.20756	0.17667	5.66029	0.03667	27.27075	3.99977	12	
13	5.49241	0.18207	0.17116	5.84236	0.03116	32.08866	4.24909	13	
14	6.26135	0.15971	0.16861	6.00207	0.02661	37.58107	4.48194	14	
15	7.13794	0.14010	0.16281	6.14217	0.02281	43.84241	4.69904	15	
16	8.13725	0.12289	0.15962	6.26606	0.01962	50.98035	4.90110	16	
17	9.27646	0.10780	0.15692	6.37286	0.01692	59.11760	5.08884	17	
18	10.57617	0.09456	0.15462	6.48742	0.01462	68.39407	5.26299	18	
19	12.05569	0.08295	0.15266	6.55037	0.01266	78.96923	5.42429	19	
20	13.74349	0.07276	0.15099	6.62313	0.01099	91.02493	5.57343	20	
21	15.66758	0.06383	0.14954	6.68696	0.00954	104.76842	5.71113	21	
22	17.96104	0.05699	0.14830	6.74294	0.00630	120.43600	5.83807	22	
23	20.36158	0.04911	0.14723	6.79206	0.00723	138.29704	5.95494	23	
24	23.21221	0.04308	0.14630	6.83514	0.00630	158.65962	6.06237	24	
25	26.46192	0.03779	0.14550	6.87293	0.00550	181.87083	6.16100	25	
26	30.16658	0.03315	0.14480	6.90608	0.00480	208.33274	6.25143	26	
27	34.38991	0.02908	0.14419	6.93515	0.00419	238.49933	6.33423	27	
28	39.20449	0.02651	0.14366	6.96066	0.00366	272.88923	6.40996	28	
29	44.69312	0.02237	0.14320	6.98304	0.00320	312.09373	6.47914	29	
30	50.96016	0.01963	0.14280	7.00266	0.00280	356.78685	6.54226	30	
31	58.06318	0.01722	0.14245	7.01968	0.00245	407.73701	6.59979	31	
32	66.21483	0.01510	0.14215	7.03498	0.00215	465.82019	6.65217	32	
33	75.48490	0.01325	0.14188	7.04823	0.00188	532.03601	6.69961	33	
34	86.06279	0.01162	0.14165	7.05985	0.00165	607.51991	6.74311	34	
35	98.10018	0.01019	0.14144	7.07005	0.00144	693.57270	6.78240	35	
40	188.86351	0.00529	0.14075	7.10504	0.00075	1342.02510	6.92996	40	
45	363.67907	0.00275	0.14039	7.12322	0.00039	2690.56480	7.01878	45	
50	700.23299	0.00143	0.14020	7.13266	0.00020	4994.52135	7.07135	50	

## DISCRETE COMPOUNDING INTEREST FACTORS

N	SINGLE PAYMENT		UNIFORM SERIES					GRADIENT SERIES	
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	Present Worth Factor	
	(F/P, 15, N)	(P/F, 15, N)	(A/P, 15, N)	(P/A, 15, N)	(F/A, 15, N)	(A/F, 15, N)	(G/A, 15, N)	(A/G, 15, N)	N
1	1.15000	0.86957	1.15000	0.86957	1.00000	1.00000	0.00000	1	
2	1.32250	0.75614	0.61512	1.62571	0.46612	2.15000	0.46612	2	
3	1.52088	0.65752	0.43798	2.28323	0.28798	3.47250	0.90713	3	
4	1.74901	0.57175	0.35027	2.86498	0.20027	4.99338	1.32626	4	
5	2.01136	0.49718	0.29832	3.36216	0.14832	6.74238	1.72281	5	
6	2.31306	0.43233	0.26424	3.78448	0.11424	8.75374	2.09719	6	
7	2.66002	0.37594	0.24036	4.16042	0.09036	11.06680	2.44985	7	
8	3.05902	0.32690	0.22285	4.48732	0.07285	13.72882	2.78133	8	
9	3.51788	0.28426	0.20957	4.77158	0.05957	16.78584	3.09223	9	
10	4.04556	0.24718	0.19925	5.01877	0.04925	20.30372	3.38320	10	
11	4.65239	0.21494	0.19107	5.23371	0.04107	24.34928	3.65494	11	
12	5.36025	0.18691	0.18448	5.42062	0.03448	29.00167	3.90820	12	
13	6.16279	0.16253	0.17911	5.58315	0.02911	34.35192	4.14376	13	
14	7.07571	0.14133	0.17469	5.72448	0.02469	40.50471	4.36241	14	
15	8.13706	0.12289	0.17102	5.84737	0.02102	47.58041	4.56496	15	
16	9.35762	0.10686	0.16795	5.95423	0.01795	55.71747	4.75225	16	
17	10.76126	0.09293	0.16537	6.04716	0.01537	65.07509	4.92509	17	
18	12.37545	0.08081	0.16319	6.12797	0.01319	75.83636	5.08431	18	
19	14.23177	0.07027	0.16134	6.19623	0.01134	88.21181	5.23073	19	
20	16.36654	0.06110	0.15976	6.25933	0.00976	102.44368	5.36514	20	
21	18.82152	0.05313	0.15842	6.31246	0.00642	118.81012	5.48832	21	
22	21.64475	0.04620	0.15727	6.35866	0.00727	137.63164	5.60102	22	
23	24.89146	0.04017	0.15628	6.39884	0.00628	159.27638	5.70398	23	
24	28.62518	0.03493	0.15543	6.43377	0.00543	184.16784	5.79789	24	
25	32.91895	0.03038	0.15470	6.46415	0.00470	212.79302	5.88343	25	
26	37.85680	0.02642	0.15407	6.49056	0.00407	245.71197	5.96123	26	
27	43.53531	0.02297	0.15353	6.51353	0.00353	283.56877	6.03190	27	
28	50.06561	0.01997	0.15306	6.53351	0.00306	327.10408	6.09600	28	
29	57.57545	0.01737	0.15265	6.55088	0.00265	377.16969	6.15408	29	
30	66.21177	0.01510	0.15230	6.56698	0.00				

20% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES				N	
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor		
	(F/P, 20, N)	(P/F, 20, N)	(A/P, 20, N)	(P/A, 20, N)	(A/F, 20, N)	(F/A, 20, N)	(A/G, 20, N)	
1	1.20000	0.83333	1.20000	0.83333	1.00000	0.00000	1	
2	1.44000	0.69444	0.65455	1.52778	0.45455	2.20000	0.45455	2
3	1.72800	0.57870	0.47473	2.10648	0.27473	3.64000	0.87912	3
4	2.07360	0.48225	0.38629	2.58873	0.18629	5.36800	1.27422	4
5	2.48832	0.40188	0.33438	2.99061	0.13438	7.44180	1.64051	5
6	2.98698	0.33490	0.30071	3.32551	0.10071	9.92992	1.97883	6
7	3.58318	0.27908	0.27742	3.60459	0.07742	12.91590	2.29016	7
8	4.29982	0.23257	0.26061	3.83716	0.06061	16.49908	2.57562	8
9	5.15978	0.19381	0.24808	4.03097	0.04808	20.79890	2.83642	9
10	6.19174	0.16151	0.23852	4.19247	0.03852	25.95868	3.07386	10
11	7.43008	0.13459	0.23110	4.32706	0.03110	32.15042	3.28929	11
12	8.91610	0.11216	0.22526	4.43922	0.02526	39.58060	3.48410	12
13	10.69932	0.09346	0.22062	4.53268	0.02062	48.49660	3.65970	13
14	12.63918	0.07789	0.21689	4.61057	0.01689	59.19592	3.81749	14
15	15.40702	0.06491	0.21388	4.67547	0.01388	72.03511	3.95684	15
16	18.48843	0.05409	0.21144	4.72956	0.01144	87.44213	4.08611	16
17	22.18611	0.04507	0.20944	4.77463	0.00944	105.93056	4.19759	17
18	26.62333	0.03756	0.20781	4.81219	0.00781	128.11867	4.29752	18
19	31.94800	0.03130	0.20646	4.84350	0.00646	154.74000	4.38607	19
20	38.33760	0.02608	0.20536	4.86968	0.00536	186.68800	4.46435	20
21	46.00612	0.02174	0.20444	4.89132	0.00444	225.02560	4.53339	21
22	55.20614	0.01811	0.20369	4.90943	0.00369	271.03072	4.59414	22
23	66.24737	0.01509	0.20307	4.92453	0.00307	326.23686	4.64750	23
24	79.49686	0.01258	0.20265	4.93710	0.00265	392.48424	4.69426	24
25	95.39622	0.01048	0.20212	4.94769	0.00212	471.98108	4.73516	25
26	114.47546	0.00874	0.20176	4.95632	0.00176	567.37730	4.77068	26
27	137.37055	0.00728	0.20147	4.96360	0.00147	681.85276	4.80201	27
28	164.84466	0.00607	0.20122	4.96967	0.00122	819.22331	4.82911	28
29	197.81359	0.00506	0.20102	4.97472	0.00102	984.06797	4.85265	29
30	237.37631	0.00421	0.20085	4.97894	0.00085	1181.88157	4.87308	30
31	284.86168	0.00351	0.20070	4.98245	0.00070	1419.25788	4.89079	31
32	341.82189	0.00293	0.20059	4.98537	0.00059	1704.10946	4.90611	32
33	410.18627	0.00244	0.20049	4.98781	0.00049	2045.93135	4.91935	33
34	492.22352	0.00203	0.20041	4.98984	0.00041	2456.11762	4.93079	34
35	590.66823	0.00169	0.20034	4.99154	0.00034	2948.34115	4.94064	35
40	1469.77157	0.00068	0.20014	4.99660	0.00014	7343.85784	4.97277	40
45	3657.26199	0.00027	0.20005	4.99863	0.00005	18281.30994	4.98769	45
50	9100.43815	0.00011	0.20002	4.99945	0.00002	45497.19075	4.99451	50

N	SINGLE PAYMENT		UNIFORM SERIES				N	
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor		
	(F/P, 25, N)	(P/F, 25, N)	(A/P, 25, N)	(P/A, 25, N)	(A/F, 25, N)	(F/A, 25, N)	(A/G, 25, N)	
1	1.25000	0.80000	1.25000	0.80000	1.00000	1.00000	0.00000	1
2	1.56250	0.64000	1.44000	0.44444	1.25000	0.44444	0.44444	2
3	1.95313	0.51200	1.95200	0.26230	1.95200	0.26230	0.85246	3
4	2.44141	0.40860	2.42344	0.17344	2.42344	0.17344	1.22493	4
5	3.05176	0.32768	3.7185	0.12185	3.68928	0.12185	2.0703	5
6	3.81470	0.26214	3.38882	0.08882	3.95142	0.08882	1.86833	6
7	4.76837	0.20972	3.16134	0.06634	3.16114	0.06634	1.21424	7
8	5.96046	0.16777	3.0040	0.05040	3.32891	0.05040	1.38725	8
9	7.45058	0.13422	2.8876	0.03876	3.46313	0.03876	1.260478	9
10	9.31323	0.10737	2.8007	0.03007	3.57060	0.03007	1.325280	10
11	11.64153	0.08590	2.7349	0.02349	3.65640	0.02349	1.296631	11
12	14.55192	0.06872	2.6845	0.01845	3.72612	0.01845	1.311462	12
13	18.18999	0.05498	2.6454	0.01454	3.78010	0.01454	1.34374	13
14	22.73737	0.04398	2.6150	0.01150	3.82408	0.01150	1.35595	14
15	28.42171	0.03518	2.5912	0.00912	3.85926	0.00912	1.365299	15
16	35.52714	0.02815	2.5724	0.00724	3.88741	0.00724	1.363660	16
17	44.40892	0.02252	2.5576	0.00576	3.90993	0.00576	1.360838	17
18	55.51115	0.01801	2.5459	0.00459	3.92794	0.00459	1.366979	18
19	69.38894	0.01441	2.5366	0.00366	3.94235	0.00366	1.372218	19
20	86.73617	0.01153	2.5292	0.00292	3.96388	0.00292	1.34294470	20
21	108.42022	0.00922	2.5233	0.00233	3.96311	0.00233	1.32968087	21
22	136.52527	0.00738	2.5186	0.00186	3.97049	0.00186	1.33810109	22
23	169.40659	0.00590	2.5148	0.00148	3.97639	0.00148	1.363643	23
24	211.75824	0.00472	2.5119	0.00119	3.98111	0.00119	1.3430295	24
25	264.69790	0.00378	2.5096	0.00096	3.98489	0.00096	1.30479118	25
26	330.87225	0.00302	2.5076	0.00076	3.98791	0.00076	1.31948898	26
27	413.59031	0.00242	2.5061	0.00061	3.99033	0.00061	1.365036123	27
28	516.98788	0.00193	2.5048	0.00048	3.99226	0.00048	1.3635153	28
29	646.23486	0.00155	2.5039	0.00039	3.99381	0.00039	1.358093941	29
30	807.79357	0.00124	2.5031	0.00031	3.99505	0.00031	1.322717427	30
31	1009.74196	0.00099	2.5025	0.00025	3.99604	0.00025	1.30496783	31
32	1262.17745	0.00079	2.5020	0.00020	3.99683	0.00020	1.304470979	32
33	1577.72181	0.00063	2.5016	0.00016	3.99746	0.00016	1.30688724	33
34	1972.15226	0.00051	2.5013	0.00013	3.99797	0.00013	1.288460905	34
35	2465.19033	0.00041	2.5010	0.00010	3.99838	0.00010		

30% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 30, N)	(P/F, 30, N)	(A/P, 30, N)	(P/A, 30, N)	(A/F, 30, N)	(F/A, 30, N)	(A/G, 30, N)	
1	1.30000	0.76923	1.30000	0.76923	1.00000	1.00000	0.00000	1
2	1.69000	0.59172	0.73478	1.36095	0.43478	2.30000	0.43478	2
3	2.19700	0.45517	0.56063	1.81611	0.25063	3.99000	0.82707	3
4	2.85610	0.36013	0.46163	2.16624	0.16163	6.18700	1.17828	4
5	3.71293	0.26933	0.41068	2.43657	0.11068	9.04310	1.49031	5
6	4.82681	0.20718	0.37839	2.64275	0.07839	12.75603	1.76545	6
7	6.27486	0.15937	0.36687	2.90211	0.06687	17.58284	2.00628	7
8	8.15731	0.12259	0.34192	2.92470	0.04192	23.85789	2.21559	8
9	10.60450	0.09430	0.33124	3.01900	0.03124	32.01500	2.39627	9
10	13.78586	0.07254	0.32346	3.09154	0.02346	42.61960	2.55122	10
11	17.92160	0.06580	0.31773	3.14734	0.01773	56.40535	2.68328	11
12	23.29809	0.04292	0.31345	3.19026	0.01345	74.32695	2.79517	12
13	30.28751	0.03302	0.31024	3.22328	0.01024	97.62504	2.88946	13
14	39.37376	0.02540	0.30782	3.24867	0.00782	127.91255	2.96850	14
15	51.18589	0.01954	0.30598	3.26821	0.00698	167.28631	3.03444	15
16	66.54166	0.01503	0.30458	3.28324	0.00458	218.47220	3.06921	16
17	86.50416	0.01156	0.30351	3.29480	0.00351	286.01386	3.13451	17
18	112.45541	0.00889	0.30269	3.30369	0.00269	371.51802	3.17183	18
19	146.19203	0.00684	0.30207	3.31053	0.00207	483.97343	3.20247	19
20	190.04964	0.00526	0.30159	3.31579	0.00159	630.16546	3.22754	20
21	247.06453	0.00405	0.30122	3.31984	0.00122	820.21510	3.24799	21
22	321.18389	0.00311	0.30094	3.32296	0.00094	1067.27963	3.26462	22
23	417.53906	0.00239	0.30072	3.32535	0.00072	1388.46351	3.27812	23
24	542.80077	0.00184	0.30055	3.32719	0.00055	1806.00257	3.28904	24
25	705.64100	0.00142	0.30043	3.32861	0.00043	2348.80334	3.29785	25
26	917.33330	0.00109	0.30033	3.32970	0.00033	3064.44434	3.30496	26
27	1192.53329	0.00084	0.30025	3.33054	0.00025	3971.77764	3.31067	27
28	1550.29328	0.00065	0.30019	3.33118	0.00019	5164.31093	3.31526	28
29	2015.38126	0.00050	0.30015	3.33168	0.00015	6714.60421	3.31894	29
30	2619.99664	0.00038	0.30011	3.33206	0.00011	8729.96548	3.32188	30
31	3405.99434	0.00029	0.30009	3.33235	0.00009	11349.98112	3.32423	31
32	4427.79264	0.00023	0.30007	3.33258	0.00007	14755.97546	3.32610	32
33	5756.13043	0.00017	0.30005	3.33275	0.00005	19183.76810	3.32760	33
34	7482.96956	0.00013	0.30004	3.33289	0.00004	24939.89653	3.32879	34
35	9727.86043	0.00010	0.30003	3.33299	0.00003	32422.86808	3.32974	35

## DISCRETE COMPOUNDING INTEREST FACTORS

40% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Gradient Factor	
	(F/P, 40, N)	(P/F, 40, N)	(A/P, 40, N)	(P/A, 40, N)	(A/F, 40, N)	(F/A, 40, N)	(A/G, 40, N)	
1	1.40000	0.71429	1.40000	0.71429	1.00000	1.00000	0.00000	1
2	1.96000	0.51020	0.81667	0.22449	0.41667	2.40000	0.41667	2
3	2.74400	0.36443	0.62936	0.158892	0.22936	4.36000	0.77982	3
4	3.84160	0.26031	0.54077	0.184923	0.14077	7.10400	1.09234	4
5	5.37824	0.18693	0.49136	0.203616	0.08136	10.94560	1.35799	5
6	7.52964	0.13281	0.46126	0.216797	0.06126	16.32384	1.58110	6
7	10.64135	0.09486	0.44192	0.226284	0.04192	23.65338	1.76635	7
8	14.75789	0.06776	0.42907	0.233060	0.02907	34.39473	1.91852	8
9	20.66105	0.04840	0.42034	0.237900	0.02034	49.15262	2.04224	9
10	28.92547	0.03457	0.41432	0.241357	0.01432	69.81366	2.14190	10
11	40.49665	0.02469	0.41013	0.243826	0.01013	98.73913	2.22149	11
12	66.68891	0.01764	0.40718	0.245590	0.00718	139.23478	2.28454	12
13	79.37148	0.01260	0.40510	0.246850	0.00510	196.92869	2.33412	13
14	111.12007	0.00900	0.40363	0.247750	0.00363	275.30017	2.37287	14
15	155.56810	0.00643	0.40259	0.248393	0.00259	386.42024	2.40296	15
16	217.79533	0.00459	0.40185	0.248852	0.00185	541.98833	2.42620	16
17	304.91347	0.00328	0.40132	0.249180	0.00132	759.78367	2.44406	17
18	426.87886	0.00234	0.40094	0.249414	0.00094	1064.69714	2.45773	18
19	597.63040	0.00167	0.40067	0.249582	0.00067	1491.57599	2.46815	19
20	836.68255	0.00120	0.40048	0.249701	0.00048	2089.20639	2.47607	20
21	1171.35558	0.00085	0.40034	0.249787	0.00034	2925.88894	2.48206	21
22	1639.89781	0.00061	0.40024	0.249848	0.00024	4097.24452	2.48658	22
23	2296.85693	0.00044	0.40017	0.249891	0.00017	5737.14232	2.48996	23
24	3214.19970	0.00031	0.40012	0.249922	0.00012	8032.99925	2.49253	24
25	4499.87958	0.00022	0.40009	0.249944	0.00009	11247.19895	2.49444	25

5% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					Gradient Factor	N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Present Value Factor		
	(F/P, 5%, N)	(P/F, 5%, N)	(A/P, 5%, N)	(P/A, 5%, N)	(F/A, 5%, N)	(A/F, 5%, N)	(G/A, 5%, N)		
1	1.05000	0.96667	1.50000	0.66667	1.00000	0.00000	1		
2	1.10250	0.44444	0.90000	1.11111	0.40000	2.50000	0.40000	2	
3	1.15763	0.29630	0.71063	1.40741	0.21063	4.75000	0.73684	3	
4	1.21265	0.19753	0.62308	1.60494	0.12308	8.12500	1.01638	4	
5	1.26937	0.13169	0.57683	1.73663	0.07583	13.18750	1.24171	5	
6	11.39063	0.08779	0.54812	1.82442	0.04812	20.78125	1.42256	6	
7	17.06594	0.06853	0.53108	1.88294	0.03108	32.17188	1.56484	7	
8	25.62691	0.03902	0.52030	1.92196	0.02030	49.25781	1.67518	8	
9	38.44336	0.02601	0.51335	1.94796	0.01335	74.88672	1.76964	9	
10	57.66504	0.01734	0.50682	1.96632	0.00682	113.33008	1.82352	10	
11	86.49756	0.01156	0.50585	1.97688	0.00585	170.99612	1.87134	11	
12	129.74634	0.00771	0.50388	1.98459	0.00388	257.49268	1.90679	12	
13	194.61951	0.00514	0.50258	1.98972	0.00258	387.23901	1.93296	13	
14	291.92926	0.00343	0.50172	1.99315	0.00172	581.86852	1.95188	14	
15	437.89389	0.00228	0.50114	1.99643	0.00114	873.78778	1.96567	15	
16	656.84084	0.00152	0.50076	1.99696	0.00076	1311.68167	1.97560	16	
17	985.26125	0.00101	0.50051	1.99797	0.00051	1968.52251	1.98273	17	
18	1477.89188	0.00068	0.50034	1.99865	0.00034	2963.78376	1.98781	18	
19	2216.83782	0.00045	0.50023	1.99910	0.00023	4431.67564	1.99143	19	
20	3325.25673	0.00030	0.50015	1.99940	0.00015	6648.51346	1.99398	20	
21	4967.88610	0.00020	0.50010	1.99960	0.00010	9973.77019	1.99579	21	
22	7481.82764	0.00013	0.50007	1.99973	0.00007	14961.65529	1.99706	22	
23	11222.74146	0.00009	0.50004	1.99982	0.00004	22443.48283	1.99795	23	
24	16834.11220	0.00006	0.50003	1.99988	0.00003	33866.22439	1.99857	24	
25	25251.16829	0.00004	0.50002	1.99992	0.00002	50500.33659	1.99901	25	

60% interest factors for discrete compounding periods

N	SINGLE PAYMENT		UNIFORM SERIES					Gradient Factor	N
	Compound Amount Factor	Present Worth Factor	Capital Recovery Factor	Present Worth Factor	Sinking Fund Factor	Compound Amount Factor	Present Value Factor		
	(F/P, 60%, N)	(P/F, 60%, N)	(A/P, 60%, N)	(P/A, 60%, N)	(F/A, 60%, N)	(A/F, 60%, N)	(G/A, 60%, N)		
1	1.60000	0.62500	1.80000	0.62500	1.00000	1.00000	0.00000	1	
2	2.56000	0.39063	0.98462	1.01563	0.38462	2.60000	0.38462	2	
3	4.09600	0.24414	0.79380	1.25977	0.19380	5.16000	0.69767	3	
4	6.55360	0.15259	0.70804	1.41235	0.10804	9.25600	0.94641	4	
5	10.48676	0.09637	0.66325	1.50772	0.06325	15.80960	1.13966	5	
6	16.77722	0.06960	0.63803	1.56733	0.03803	26.29636	1.28637	6	
7	26.84356	0.03725	0.62322	1.60458	0.02322	43.07258	1.39681	7	
8	42.94967	0.02328	0.61430	1.62786	0.01430	69.91612	1.47596	8	
9	68.71948	0.01455	0.60896	1.64241	0.00896	112.86579	1.53377	9	
10	109.95116	0.00909	0.60551	1.65151	0.00551	181.58627	1.57488	10	
11	175.92186	0.00668	0.60343	1.65719	0.00343	291.53643	1.60378	11	
12	281.47496	0.00365	0.60214	1.66075	0.00214	467.45829	1.62388	12	
13	450.35996	0.00222	0.60134	1.66297	0.00134	748.93327	1.63774	13	
14	720.57594	0.00139	0.60063	1.66435	0.00063	1199.29323	1.64721	14	
15	1152.92150	0.00087	0.60052	1.66522	0.00052	1919.86917	1.65364	15	
16	1844.67441	0.00064	0.60033	1.66676	0.00033	3072.79068	1.65799	16	
17	2951.47905	0.00034	0.60020	1.66610	0.00020	4917.45650	1.66090	17	
18	4722.36648	0.00021	0.60013	1.66631	0.00013	7868.94414	1.66286	18	
19	7655.79637	0.00013	0.60008	1.66645	0.00008	12591.31062	1.66415	19	
20	12069.25820	0.00008	0.60005	1.66653	0.00005	20147.09699	1.66501	20	