**Table 1:** Future Value Interest Factor (FVIF) (\$1 at r% for n periods) FVIF =  $(1+r)^n$ ; FV = PV (FVIF<sub>r,n</sub>)

% 4% 5%	3% 4% 5%	4% 5%	2%	· (,		r,n.) 7%	%8	%6	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%	40%
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1	1.00	_	1.0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.02 1.03 1.04 1.05 1.06 1.07 1.08 1.09 1.10 1.11	1.03 1.04 1.05 1.06 1.07 1.08 1.09 1.10	1.04 1.05 1.06 1.07 1.08 1.09 1.10	1.05 1.06 1.07 1.08 1.09 1.10	1.06 1.07 1.08 1.09 1.10	1.08 1.09 1.10	1.09 1.10	1.10	_	1.11		1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.25	1.30	1.40
1.04 1.06 1.08 1.10 1.12 1.14 1.17 1.19 1.21 1.23	1.06 1.08 1.10 1.12 1.14 1.17 1.19 1.21 1	1.08 1.10 1.12 1.14 1.17 1.19 1.21 1	1.10 1.12 1.14 1.17 1.19 1.21 1	1.12 1.14 1.17 1.19 1.21 1	1.17 1.19 1.21 1	1.19 1.21 1	1.21	_	1.23		1.25	1.28	1.30	1.32	1.35	1.37	1.39	1.42	1.44	1.56	1.69	1.96
1.06 1.09 1.12 1.16 1.19 1.23 1.26 1.30 1.33 1.37	1.09 1.12 1.16 1.19 1.23 1.26 1.30 1.33 1	1.12 1.16 1.19 1.23 1.26 1.30 1.33 1	1.16 1.19 1.23 1.26 1.30 1.33 1	1.19 1.23 1.26 1.30 1.33 1	1.26 1.30 1.33 1	1.30 1.33 1	1.33	_	1.37		1.40	1.44	1.48	1.52	1.56	1.60	1.64	1.69	1.73	1.95	2.20	2.74
1.08 1.13 1.17 1.22 1.26 1.31 1.36 1.41 1.46 1.52	1.13 1.17 1.22 1.26 1.31 1.36 1.41 1.46 1	1.17 1.22 1.26 1.31 1.36 1.41 1.46 1	1.22 1.26 1.31 1.36 1.41 1.46 1	1.26 1.31 1.36 1.41 1.46 1	1.36 1.41 1.46 1	1.41 1.46 1	1.46	_	1.52	01	1.57	1.63	1.69	1.75	1.81	1.87	1.94	2.01	2.07	2.44	2.86	3.84
1.10 1.16 1.22 1.28 1.34 1.40 1.47 1.54 1.61 1.6	1.16 1.22 1.28 1.34 1.40 1.47 1.54 1.61 1	1.22 1.28 1.34 1.40 1.47 1.54 1.61 1	1.28 1.34 1.40 1.47 1.54 1.61 1	1.34 1.40 1.47 1.54 1.61 1	1.47 1.54 1.61 1	1.54 1.61 1	1.61	_	1.6	69.	1.76	1.84	1.93	2.01	2.10	2.19	2.29	2.39	2.49	3.05	3.71	5.38
1.13 1.19 1.27 1.34 1.42 1.50 1.59 1.68 1.77 1.	1.19 1.27 1.34 1.42 1.50 1.59 1.68 1.77 1	1.27 1.34 1.42 1.50 1.59 1.68 1.77 1	1.34 1.42 1.50 1.59 1.68 1.77 1	1.42 1.50 1.59 1.68 1.77 1	1.59 1.68 1.77 1	1.68 1.77 1	1.77	_	<del>-</del>	.87	1.97	2.08	2.19	2.31	2.44	2.57	2.70	2.84	2.99	3.81	4.83	7.53
1.15 1.23 1.32 1.41 1.50 1.61 1.71 1.83 1.95 2	1.23 1.32 1.41 1.50 1.61 1.71 1.83 1.95 2	1.32 1.41 1.50 1.61 1.71 1.83 1.95 2	1.41 1.50 1.61 1.71 1.83 1.95 2	1.50 1.61 1.71 1.83 1.95 2	1.71 1.83 1.95 2	1.83 1.95 2	1.95	2	2	80.	2.21	2.35	2.50	2.66	2.83	3.00	3.19	3.38	3.58	4.77	6.27	10.54
1.17 1.27 1.37 1.48 1.59 1.72 1.85 1.99 2.14 2	1.27 1.37 1.48 1.59 1.72 1.85 1.99 2.14	1.37 1.48 1.59 1.72 1.85 1.99 2.14	1.48 1.59 1.72 1.85 1.99 2.14	1.59 1.72 1.85 1.99 2.14	1.85 1.99 2.14	1.99 2.14	2.14		7	.30	2.48	2.66	2.85	3.06	3.28	3.51	3.76	4.02	4.30	5.96	8.16	14.76
1.20 1.30 1.42 1.55 1.69 1.84 2.00 2.17 2.36 2	1.30 1.42 1.55 1.69 1.84 2.00 2.17	1.42 1.55 1.69 1.84 2.00 2.17	1.55 1.69 1.84 2.00 2.17	1.69 1.84 2.00 2.17	1.84 2.00 2.17	2.17		2.36 2	7	.56	2.77	3.00	3.25	3.52	3.80	4.11	4.44	4.79	5.16	7.45	10.60	20.66
1.22 1.34 1.48 1.63 1.79 1.97 2.16 2.37 2.59 2	1.34 1.48 1.63 1.79 1.97 2.16 2.37	1.48 1.63 1.79 1.97 2.16 2.37	1.63 1.79 1.97 2.16 2.37	1.79 1.97 2.16 2.37	2.16 2.37	2.37		2.59	"	48.	3.11	3.39	3.71	4.05	4.41	4.81	5.23	5.69	6.19	9.31	13.79	28.93
1.24 1.38 1.54 1.71 1.90 2.10 2.33 2.58 2.85 3.	1.38 1.54 1.71 1.90 2.10 2.33 2.58 2.85	1.54 1.71 1.90 2.10 2.33 2.58 2.85	1.71 1.90 2.10 2.33 2.58 2.85	1.90 2.10 2.33 2.58 2.85	2.33 2.58 2.85	2.58 2.85	2.85		κý	3.15	3.48	3.84	4.23	4.65	5.12	5.62	6.18	6.78	7.43	11.64	17.92	40.50
1.27 1.43 1.60 1.80 2.01 2.25 2.52 2.81 3.14 3.	1.43 1.60 1.80 2.01 2.25 2.52 2.81 3.14	1.60 1.80 2.01 2.25 2.52 2.81 3.14	1.80 2.01 2.25 2.52 2.81 3.14	2.01 2.25 2.52 2.81 3.14	2.52 2.81 3.14	2.81 3.14	3.14		ю.	3.50	3.90	4.33	4.82	5.35	5.94	6.58	7.29	8.06	8.92	14.55	23.30	56.69
1.29 1.47 1.67 1.89 2.13 2.41 2.72 3.07 3.45 3.	1.47 1.67 1.89 2.13 2.41 2.72 3.07 3.45	1.67 1.89 2.13 2.41 2.72 3.07 3.45	1.89 2.13 2.41 2.72 3.07 3.45	2.13 2.41 2.72 3.07 3.45	2.41 2.72 3.07 3.45	3.07 3.45	3.45		e.	3.88	4.36	4.90	5.49	6.15	6.89	7.70	8.60	9.60	10.70	18.19	30.29	79.37
1.32 1.51 1.73 1.98 2.26 2.58 2.94 3.34 3.80 4.	1.51 1.73 1.98 2.26 2.58 2.94 3.34 3.80	1.73 1.98 2.26 2.58 2.94 3.34 3.80	1.98 2.26 2.58 2.94 3.34 3.80	2.26 2.58 2.94 3.34 3.80	2.58 2.94 3.34 3.80	3.34 3.80	3.80		4	4.31	4.89	5.53	6.26	7.08	7.99	9.01	10.15	11.42	12.84	22.74	39.37	111.12
1.35 1.56 1.80 2.08 2.40 2.76 3.17 3.64 4.18 4.	1.56 1.80 2.08 2.40 2.76 3.17 3.64 4.18	1.80 2.08 2.40 2.76 3.17 3.64 4.18	2.08 2.40 2.76 3.17 3.64 4.18	2.40 2.76 3.17 3.64 4.18	2.76 3.17 3.64 4.18	3.64 4.18	4.18		4.	4.78	5.47	6.25	7.14	8.14	9.27	10.54	11.97	13.59	15.41	28.42	51.19	155.57
1.37 1.60 1.87 2.18 2.54 2.95 3.43 3.97 4.59 5.31	1.60 1.87 2.18 2.54 2.95 3.43 3.97 4.59	1.87 2.18 2.54 2.95 3.43 3.97 4.59	2.18 2.54 2.95 3.43 3.97 4.59	2.54 2.95 3.43 3.97 4.59	3.43 3.97 4.59	3.97 4.59	4.59		5.3	75	6.13	7.07	8.14	9.36	10.75	12.33	14.13	16.17	18.49	35.53	66.54	217.80
1.40 1.65 1.95 2.29 2.69 3.16 3.70 4.33 5.05 5.9	1.65 1.95 2.29 2.69 3.16 3.70 4.33 5.05 5	1.95 2.29 2.69 3.16 3.70 4.33 5.05 5	2.29 2.69 3.16 3.70 4.33 5.05 5	2.69 3.16 3.70 4.33 5.05 5	3.16 3.70 4.33 5.05 5	4.33 5.05 5	5.05 5	S)		06:	6.87	7.99	9.28	10.76	12.47	14.43	16.67	19.24	22.19	44.41	86.50	304.91
1.43 1.70 2.03 2.41 2.85 3.38 4.00 4.72 5.56 6	1.70 2.03 2.41 2.85 3.38 4.00 4.72 5.56	2.03 2.41 2.85 3.38 4.00 4.72 5.56	2.41 2.85 3.38 4.00 4.72 5.56	2.85 3.38 4.00 4.72 5.56	3.38 4.00 4.72 5.56	4.72 5.56	5.56		9	.54	7.69	9.05	10.58	12.38	14.46	16.88	19.67	22.90	26.62	55.51	112.46	426.88
1.46 1.75 2.11 2.53 3.03 3.62 4.32 5.14 6.12 7	1.75 2.11 2.53 3.03 3.62 4.32 5.14	2.11 2.53 3.03 3.62 4.32 5.14	2.53 3.03 3.62 4.32 5.14	3.03 3.62 4.32 5.14	3.62 4.32 5.14	5.14		6.12 7	7	.26	8.61	10.20	12.06	14.23	16.78	19.75	23.21	27.25	31.95	69.39	146.19	597.63
1.49 1.81 2.19 2.65 3.21 3.87 4.66 5.60 6.73 8.	1.81 2.19 2.65 3.21 3.87 4.66 5.60 6.73	2.19 2.65 3.21 3.87 4.66 5.60 6.73	2.65 3.21 3.87 4.66 5.60 6.73	3.21 3.87 4.66 5.60 6.73	4.66 5.60 6.73	5.60 6.73	6.73		ω̈	90.8	9.65	11.52	13.74	16.37	19.46	23.11	27.39	32.43	38.34	86.74	190.05	836.68
1.52 1.86 2.28 2.79 3.40 4.14 5.03 6.11 7.40 8	1.86 2.28 2.79 3.40 4.14 5.03 6.11 7.40	2.28 2.79 3.40 4.14 5.03 6.11 7.40	2.79 3.40 4.14 5.03 6.11 7.40	3.40 4.14 5.03 6.11 7.40	4.14 5.03 6.11 7.40	6.11 7.40	7.40		∞	8.95	10.80	13.02	15.67	18.82	22.57	27.03	32.32	38.59	46.01	108.42	247.06	1,171.36
1.55 1.92 2.37 2.93 3.60 4.43 5.44 6.66 8.14 9	1.92 2.37 2.93 3.60 4.43 5.44 6.66	2.37 2.93 3.60 4.43 5.44 6.66	2.93 3.60 4.43 5.44 6.66	3.60 4.43 5.44 6.66	5.44 6.66	99.9		8.14 9	0)	.93	12.10	14.71	17.86	21.64	26.19	31.63	38.14	45.92	55.21	135.53	321.18	1,639.90
1.58 1.97 2.46 3.07 3.82 4.74 5.87 7.26 8.95 11.	1.97 2.46 3.07 3.82 4.74 5.87 7.26 8.95 11	2.46 3.07 3.82 4.74 5.87 7.26 8.95 11	3.07 3.82 4.74 5.87 7.26 8.95 11	3.82 4.74 5.87 7.26 8.95 11	5.87 7.26 8.95 11	7.26 8.95 11	8.95 11	=	<del>_</del>	.03	13.55	16.63	20.36	24.89	30.38	37.01	45.01	54.65	66.25	169.41	417.54	2,295.86
1.61 2.03 2.56 3.23 4.05 5.07 6.34 7.91 9.85 12.2	2.03 2.56 3.23 4.05 5.07 6.34 7.91 9.85 12	2.56 3.23 4.05 5.07 6.34 7.91 9.85 12	3.23 4.05 5.07 6.34 7.91 9.85 12	4.05 5.07 6.34 7.91 9.85 12	5.07 6.34 7.91 9.85 12	7.91 9.85 12	9.85 12	12	12.2	.24	15.18	18.79	23.21	28.63	35.24	43.30	53.11	65.03	79.50	211.76	542.80	3,214.20
1.64 2.09 2.67 3.39 4.29 5.43 6.85 8.62 10.83 13.9	2.09 2.67 3.39 4.29 5.43 6.85 8.62 10.83 13	2.67 3.39 4.29 5.43 6.85 8.62 10.83 13	3.39 4.29 5.43 6.85 8.62 10.83 13	4.29 5.43 6.85 8.62 10.83 13	5.43 6.85 8.62 10.83 13	8.62 10.83 13	10.83 13	13	13.6	.59	17.00	21.23	26.46	32.92	40.87	50.66	62.67	77.39	95.40	264.70	705.64	4,499.88
1.81 2.43 3.24 4.32 5.74 7.61 10.06 13.27 17.45 22.	2.43 3.24 4.32 5.74 7.61 10.06 13.27 17.45 22	3.24 4.32 5.74 7.61 10.06 13.27 17.45 22	4.32 5.74 7.61 10.06 13.27 17.45 22	5.74 7.61 10.06 13.27 17.45 22	10.06 13.27 17.45 22	13.27 17.45 22	17.45 22	22	22.	.89	29.96	39.12	50.95	66.21	85.85	111.06	143.37	184.68	237.38	807.79	2,620.00	24,201.4
2.21 3.26 4.80 7.04 10.29 14.97 21.72 31.41 45.26 65.	3.26 4.80 7.04 10.29 14.97 21.72 31.41 45.26	4.80 7.04 10.29 14.97 21.72 31.41 45.26	7.04 10.29 14.97 21.72 31.41 45.26	10.29 14.97 21.72 31.41 45.26	14.97 21.72 31.41 45.26	31.41 45.26	45.26		99	00.9	93.05	132.78	188.88	267.86	378.72	533.87	750.38	1,051.67	1,469.77	7,523.16	36,118.9	700,038
2.69 4.38 7.11 11.47 18.42 29.46 46.90 74.36 117.39 184	4.38 7.11 11.47 18.42 29.46 46.90 74.36 117.39	7.11 11.47 18.42 29.46 46.90 74.36 117.39	11.47 18.42 29.46 46.90 74.36 117.39	18.42 29.46 46.90 74.36 117.39	29.46 46.90 74.36 117.39	74.36 117.39	117.39		<u>8</u>	.56	289.00	450.74	700.23	1,083.66	1,670.70	2,566.22	3,927.36	5,988.91	9,100.44	70,064.9	497,929	
3.28 5.89 10.52 18.68 32.99 57.95 101.26 176.03 304.48 524	5.89 10.52 18.68 32.99 57.95 101.26 176.03 304.48 524	10.52 18.68 32.99 57.95 101.26 176.03 304.48 524	18.68 32.99 57.95 101.26 176.03 304.48 524	32.99 57.95 101.26 176.03 304.48 524	57.95 101.26 176.03 304.48 524	176.03 304.48 524	304.48 524	524	524	90:	897.60	1,530.05	2,595.92	4,384.00	7,370.20	12,335.4	20,555.1	34,105.0	56,347.5	652,530		

**Table 2:** Present Value Interest Factor (PVIF) (\$1 at r% for n periods)  $PVIF = (1+r)^{-n}$ ; PV = FV (PVIF<sub>r,n</sub>)

· -	ر 1	$(\tau,\tau)$	,	•	<u>.</u>	ı,ı																	
n/r	1%	2%	3%	4%	2%	<b>%9</b>	7%	8%	%6	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%	40%
0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	0.800	0.769	0.714
7	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694	0.640	0.592	0.510
က	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	609.0	0.593	0.579	0.512	0.455	0.364
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482	0.410	0.350	0.260
2	0.951	906.0	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402	0.328	0.269	0.186
9	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335	0.262	0.207	0.133
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279	0.210	0.159	0.095
<b>∞</b>	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233	0.168	0.123	0.068
6	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194	0.134	0.094	0.048
9	0.905	0.820	0.744	929.0	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162	0.107	0.073	0.035
7	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135	0.086	0.056	0.025
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112	0.069	0.043	0.018
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093	0.055	0.033	0.013
4	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078	0.044	0.025	600.0
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065	0.035	0.020	0.006
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054	0.028	0.015	0.005
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.069	090.0	0.052	0.045	0.023	0.012	0.003
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038	0.018	600.0	0.002
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	090.0	0.051	0.043	0.037	0.031	0.014	0.007	0.002
70	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026	0.012	0.005	0.001
77	0.811	0.660	0.538	0.439	0.359	0.294	0.242	0.199	0.164	0.135	0.112	0.093	0.077	0.064	0.053	0.044	0.037	0.031	0.026	0.022	0.009	0.004	0.001
22	0.803	0.647	0.522	0.422	0.342	0.278	0.226	0.184	0.150	0.123	0.101	0.083	0.068	0.056	0.046	0.038	0.032	0.026	0.022	0.018	0.007	0.003	0.001
23	0.795	0.634	0.507	0.406	0.326	0.262	0.211	0.170	0.138	0.112	0.091	0.074	090.0	0.049	0.040	0.033	0.027	0.022	0.018	0.015	900.0	0.002	0.000
54	0.788	0.622	0.492	0.390	0.310	0.247	0.197	0.158	0.126	0.102	0.082	0.066	0.053	0.043	0.035	0.028	0.023	0.019	0.015	0.013	0.005	0.002	0.000
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010	0.004	0.001	0.000
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004	0.001	0.000	0.000
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000
20	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.550	0.305	0.170	0.095	0.054	0.030	0.017	0.010	0.006	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 3: Future Value of an Annuity Interest Factor (FVIFA) (\$1 per period at r% for n periods)  $FVIFA = (1+r)^n - 1$ ;  $FVAN = PMT (FVIFA_{r,n})$ 

r

i		r										
n/r	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2	2.010	2.020	2.030	2.040	2.050	2.060	2.070	2.080	2.090	2.100	2.110	2.120
3	3.030	3.060	3.091	3.122	3.153	3.184	3.215	3.246	3.278	3.310	3.342	3.374
4	4.060	4.122	4.184	4.246	4.310	4.375	4.440	4.506	4.573	4.641	4.710	4.779
5	5.101	5.204	5.309	5.416	5.526	5.637	5.751	5.867	5.985	6.105	6.228	6.353
6	6.152	6.308	6.468	6.633	6.802	6.975	7.153	7.336	7.523	7.716	7.913	8.115
7	7.214	7.434	7.662	7.898	8.142	8.394	8.654	8.923	9.200	9.487	9.783	10.089
8	8.286	8.583	8.892	9.214	9.549	9.897	10.260	10.637	11.028	11.436	11.859	12.300
9	9.369	9.755	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.164	14.776
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	16.722	17.549
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713	24.133
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	26.212	28.029
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	30.095	32.393
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	34.405	37.280
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	39.190	42.753
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	44.501	48.884
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	50.396	55.750
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	56.939	63.440
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	64.203	72.052
21	23.239	25.783	28.676	31.969	35.719	39.993	44.865	50.423	56.765	64.002	72.265	81.699
22	24.472	27.299	30.537	34.248	38.505	43.392	49.006	55.457	62.873	71.403	81.214	92.503
23	25.716	28.845	32.453	36.618	41.430	46.996	53.436	60.893	69.532	79.543	91.148	104.603
24	26.973	30.422	34.426	39.083	44.502	50.816	58.177	66.765	76.790	88.497	102.174	118.155
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	114.413	133.334
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.283	136.308	164.494	199.021	241.333
40	48.886	60.402	75.401	95.026	120.800	154.762	199.635	259.057	337.882	442.593	581.826	767.091
50	64.463	84.579	112.797	152.667	209.348	290.336	406.529	573.770	815.084	1,163.91	1,668.77	2,400.0
60	81.670	114.052	163.053	237.991	353.584	533.128	813.520	1,253.21	1,944.79	3,034.82	4,755.07	7,471.6
ı												
n/r	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%	40%	
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1 2	1.000 2.130	1.000 2.140	1.000 2.150	1.000 2.160	1.000 2.170	1.000 2.180	1.000 2.190	1.000 2.200	1.000 2.250	1.000 2.300	1.000 2.400	
1 2 3	1.000 2.130 3.407	1.000 2.140 3.440	1.000 2.150 3.473	1.000 2.160 3.506	1.000 2.170 3.539	1.000 2.180 3.572	1.000 2.190 3.606	1.000 2.200 3.640	1.000 2.250 3.813	1.000 2.300 3.990	1.000 2.400 4.360	
1 2 3 4	1.000 2.130 3.407 4.850	1.000 2.140 3.440 4.921	1.000 2.150 3.473 4.993	1.000 2.160 3.506 5.066	1.000 2.170 3.539 5.141	1.000 2.180 3.572 5.215	1.000 2.190 3.606 5.291	1.000 2.200 3.640 5.368	1.000 2.250 3.813 5.766	1.000 2.300 3.990 6.187	1.000 2.400 4.360 7.104	
1 2 3 4 5	1.000 2.130 3.407 4.850 6.480	1.000 2.140 3.440 4.921 6.610	1.000 2.150 3.473 4.993 6.742	1.000 2.160 3.506 5.066 6.877	1.000 2.170 3.539 5.141 7.014	1.000 2.180 3.572 5.215 7.154	1.000 2.190 3.606 5.291 7.297	1.000 2.200 3.640 5.368 7.442	1.000 2.250 3.813 5.766 8.207	1.000 2.300 3.990 6.187 9.043	1.000 2.400 4.360 7.104 10.946	
1 2 3 4 5	1.000 2.130 3.407 4.850 6.480 8.323	1.000 2.140 3.440 4.921 6.610 8.536	1.000 2.150 3.473 4.993 6.742 8.754	1.000 2.160 3.506 5.066 6.877 8.977	1.000 2.170 3.539 5.141 7.014 9.207	1.000 2.180 3.572 5.215 7.154 9.442	1.000 2.190 3.606 5.291 7.297 9.683	1.000 2.200 3.640 5.368 7.442 9.930	1.000 2.250 3.813 5.766 8.207 11.259	1.000 2.300 3.990 6.187 9.043 12.756	1.000 2.400 4.360 7.104 10.946 16.324	
1 2 3 4 5 6 7	1.000 2.130 3.407 4.850 6.480 8.323 10.405	1.000 2.140 3.440 4.921 6.610 8.536 10.730	1.000 2.150 3.473 4.993 6.742 8.754 11.067	1.000 2.160 3.506 5.066 6.877 8.977 11.414	1.000 2.170 3.539 5.141 7.014 9.207 11.772	1.000 2.180 3.572 5.215 7.154 9.442 12.142	1.000 2.190 3.606 5.291 7.297 9.683 12.523	1.000 2.200 3.640 5.368 7.442 9.930 12.916	1.000 2.250 3.813 5.766 8.207 11.259 15.073	1.000 2.300 3.990 6.187 9.043 12.756 17.583	1.000 2.400 4.360 7.104 10.946 16.324 23.853	
1 2 3 4 5	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233	1.000 2.150 3.473 4.993 6.742 8.754 11.067	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395	
1 2 3 4 5 6 7 8	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153	
1 2 3 4 5 6 7 8 9	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814	
1 2 3 4 5 6 7 8 9 10	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739	
1 2 3 4 5 6 7 8 9 10	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235	
1 2 3 4 5 6 7 8 9 10 11 12 13	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929	
1 2 3 4 5 6 7 8 9 10 11 12 13	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784	
1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6	
1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2	
1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491 120.205	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436 138.297	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632 159.276	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415 183.601	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172 211.801	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345 244.487	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438 282.362	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031 326.237	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101 673.626	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3 1,388.5	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2 5,737.1	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491 120.205 136.831	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436 138.297 158.659	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632 159.276 184.168	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415 183.601 213.978	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172 211.801 248.808	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345 244.487 289.494	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438 282.362 337.010	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031 326.237 392.484	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101 673.626 843.033	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3 1,388.5 1,806.0	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2 5,737.1 8,033.0	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491 120.205 136.831 155.620	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436 138.297 158.659 181.871	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632 159.276 184.168 212.793	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415 183.601 213.978 249.214	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172 211.801 248.808 292.105	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345 244.487 289.494 342.603	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438 282.362 337.010 402.042	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031 326.237 392.484 471.981	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101 673.626 843.033 1,054.8	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3 1,388.5 1,806.0 2,348.8	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2 5,737.1 8,033.0 11,247.2	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 30	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491 120.205 136.831 155.620 293.199	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436 138.297 158.659 181.871 356.787	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632 159.276 184.168 212.793 434.745	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415 183.601 213.978 249.214 530.312	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172 211.801 248.808 292.105 647.439	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345 244.487 289.494 342.603 790.948	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438 282.362 337.010 402.042 966.712	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031 326.237 392.484 471.981 1,181.9	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101 673.626 843.033 1,054.8	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3 1,388.5 1,806.0 2,348.8 8,730.0	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2 5,737.1 8,033.0	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 30 40	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491 120.205 136.831 155.620 293.199 1,013.7	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436 138.297 158.659 181.871 356.787 1,342.0	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632 159.276 184.168 212.793 434.745 1,779.1	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415 183.601 213.978 249.214 530.312 2,360.8	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172 211.801 248.808 292.105 647.439 3,134.5	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345 244.487 289.494 342.603 790.948 4,163.2	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438 282.362 337.010 402.042 966.712 5,529.8	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031 326.237 392.484 471.981 1,181.9 7,343.9	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101 673.626 843.033 1,054.8 3,227.2 30,088.7	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3 1,388.5 1,806.0 2,348.8	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2 5,737.1 8,033.0 11,247.2	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 30	1.000 2.130 3.407 4.850 6.480 8.323 10.405 12.757 15.416 18.420 21.814 25.650 29.985 34.883 40.417 46.672 53.739 61.725 70.749 80.947 92.470 105.491 120.205 136.831 155.620 293.199	1.000 2.140 3.440 4.921 6.610 8.536 10.730 13.233 16.085 19.337 23.045 27.271 32.089 37.581 43.842 50.980 59.118 68.394 78.969 91.025 104.768 120.436 138.297 158.659 181.871 356.787	1.000 2.150 3.473 4.993 6.742 8.754 11.067 13.727 16.786 20.304 24.349 29.002 34.352 40.505 47.580 55.717 65.075 75.836 88.212 102.444 118.810 137.632 159.276 184.168 212.793 434.745	1.000 2.160 3.506 5.066 6.877 8.977 11.414 14.240 17.519 21.321 25.733 30.850 36.786 43.672 51.660 60.925 71.673 84.141 98.603 115.380 134.841 157.415 183.601 213.978 249.214 530.312	1.000 2.170 3.539 5.141 7.014 9.207 11.772 14.773 18.285 22.393 27.200 32.824 39.404 47.103 56.110 66.649 78.979 93.406 110.285 130.033 153.139 180.172 211.801 248.808 292.105 647.439	1.000 2.180 3.572 5.215 7.154 9.442 12.142 15.327 19.086 23.521 28.755 34.931 42.219 50.818 60.965 72.939 87.068 103.740 123.414 146.628 174.021 206.345 244.487 289.494 342.603 790.948	1.000 2.190 3.606 5.291 7.297 9.683 12.523 15.902 19.923 24.709 30.404 37.180 45.244 54.841 66.261 79.850 96.022 115.266 138.166 165.418 197.847 236.438 282.362 337.010 402.042 966.712	1.000 2.200 3.640 5.368 7.442 9.930 12.916 16.499 20.799 25.959 32.150 39.581 48.497 59.196 72.035 87.442 105.931 128.117 154.740 186.688 225.026 271.031 326.237 392.484 471.981 1,181.9	1.000 2.250 3.813 5.766 8.207 11.259 15.073 19.842 25.802 33.253 42.566 54.208 68.760 86.949 109.687 138.109 173.636 218.045 273.556 342.945 429.681 538.101 673.626 843.033 1,054.8	1.000 2.300 3.990 6.187 9.043 12.756 17.583 23.858 32.015 42.619 56.405 74.327 97.625 127.913 167.286 218.472 285.014 371.518 483.973 630.165 820.215 1,067.3 1,388.5 1,806.0 2,348.8 8,730.0	1.000 2.400 4.360 7.104 10.946 16.324 23.853 34.395 49.153 69.814 98.739 139.235 195.929 275.300 386.420 541.988 759.784 1,064.7 1,491.6 2,089.2 2,925.9 4,097.2 5,737.1 8,033.0 11,247.2	

**Table 4:** Present Value of an Annuity Interest Factor (PVIFA) (\$1 per period at r\% for n periods)  $PVIFA = 1 - (1+r)^{-n}$ ;  $PVAN = PMT (PVIFA_{r,n})$ 

PV	IFA = 1	l-(1+r)	<u>)                                    </u>	PVA	N = P	MT (P	$VIFA_{r,}$	<sub>n</sub> )				
		r										
n/r	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.103	6.982	6.628
15	13.865									7.606		6.811
		12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061		7.191	
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.292	8.649	8.075	7.562
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.442	8.772	8.176	7.645
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.580	8.883	8.266	7.718
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.707	8.985	8.348	7.784
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304
60	44.955	34.761	27.676	22.623	18.929	16.161	14.039	12.377	11.048	9.967	9.074	8.324
	Ī											
n/r	13%			5%	16%	17%	18%	19%	20%	25		30%
1	0.885	0.877			.862	0.855	0.847	0.840	0.833	0.80		0.769
2	1.668	1.647			.605	1.585	1.566	1.547	1.528	1.44		1.361
3	2.361	2.322			2.246	2.210	2.174	2.140	2.106	1.95		1.816
4	2.974	2.914			.798	2.743	2.690	2.639	2.589	2.36		2.166
5	3.517	3.433			3.274	3.199	3.127	3.058	2.991	2.68		2.436
6	3.998	3.889			.685	3.589	3.498	3.410	3.326	2.95		2.643
7	4.423	4.288			.039	3.922	3.812	3.706	3.605	3.16		2.802
8	4.799	4.639			.344	4.207	4.078	3.954	3.837	3.32		2.925
9	5.132	4.946	6 4.7	72 4	.607	4.451	4.303	4.163	4.031	3.46	3	3.019
10	5.426	5.216			.833	4.659	4.494	4.339	4.192	3.57		3.092
11	5.687	5.453	5.2	34 5	5.029	4.836	4.656	4.486	4.327	3.65	6	3.147
12	5.918	5.660	5.4	21 5	5.197	4.988	4.793	4.611	4.439	3.72		3.190
13	6.122	5.842	2 5.5	83 5	.342	5.118	4.910	4.715	4.533	3.78	30	3.223
14	6.302	6.002	2 5.7	24 5	.468	5.229	5.008	4.802	4.611	3.82	24	3.249
15	6.462	6.142	2 5.8	47 5	5.575	5.324	5.092	4.876	4.675	3.85	59	3.268
16	6.604	6.265	5 5.9	54 5	6.668	5.405	5.162	4.938	4.730	3.88	37	3.283
17	6.729	6.373	6.0	47 5	5.749	5.475	5.222	4.990	4.775	3.91	0	3.295
40	6.040	0.40	7 64	20 5	010	E E 2 4	E 272	E 022	4.040	2.00		2 204

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