

## Annual Value of One Present Dollar (Annual Payment)

PV to AV Annually

Years	Nominal Annual Rate of Interest (%)													
	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0500	1.0550	1.0600	1.0650	1.0700	1.0750	1.0800	1.0850	1.0900	1.0950	1.1000	1.1100	1.1200	1.1500
2	0.5378	0.5416	0.5454	0.5493	0.5531	0.5569	0.5608	0.5646	0.5685	0.5723	0.5762	0.5839	0.5917	0.6151
3	0.3672	0.3707	0.3741	0.3776	0.3811	0.3845	0.3880	0.3915	0.3951	0.3986	0.4021	0.4092	0.4163	0.4380
4	0.2820	0.2853	0.2886	0.2919	0.2952	0.2986	0.3019	0.3053	0.3087	0.3121	0.3155	0.3223	0.3292	0.3503
5	0.2310	0.2342	0.2374	0.2406	0.2439	0.2472	0.2505	0.2538	0.2571	0.2604	0.2638	0.2706	0.2774	0.2983
6	0.1970	0.2002	0.2034	0.2066	0.2098	0.2130	0.2163	0.2196	0.2229	0.2263	0.2296	0.2364	0.2432	0.2642
7	0.1728	0.1760	0.1791	0.1823	0.1856	0.1888	0.1921	0.1954	0.1987	0.2020	0.2054	0.2122	0.2191	0.2404
8	0.1547	0.1579	0.1610	0.1642	0.1675	0.1707	0.1740	0.1773	0.1807	0.1840	0.1874	0.1943	0.2013	0.2229
9	0.1407	0.1438	0.1470	0.1502	0.1535	0.1568	0.1601	0.1634	0.1668	0.1702	0.1736	0.1806	0.1877	0.2096
10	0.1295	0.1327	0.1359	0.1391	0.1424	0.1457	0.1490	0.1524	0.1558	0.1593	0.1627	0.1698	0.1770	0.1993
15	0.0963	0.0996	0.1030	0.1064	0.1098	0.1133	0.1168	0.1204	0.1241	0.1277	0.1315	0.1391	0.1468	0.1710
20	0.0802	0.0837	0.0872	0.0908	0.0944	0.0981	0.1019	0.1057	0.1095	0.1135	0.1175	0.1256	0.1339	0.1598
25	0.0710	0.0745	0.0782	0.0820	0.0858	0.0897	0.0937	0.0977	0.1018	0.1060	0.1102	0.1187	0.1275	0.1547
30	0.0651	0.0688	0.0726	0.0766	0.0806	0.0847	0.0888	0.0931	0.0973	0.1017	0.1061	0.1150	0.1241	0.1523
35	0.0611	0.0650	0.0690	0.0731	0.0772	0.0815	0.0858	0.0902	0.0946	0.0991	0.1037	0.1129	0.1223	0.1511
40	0.0583	0.0623	0.0665	0.0707	0.0750	0.0794	0.0839	0.0884	0.0930	0.0976	0.1023	0.1117	0.1213	0.1506
45	0.0563	0.0604	0.0647	0.0691	0.0735	0.0780	0.0826	0.0872	0.0919	0.0966	0.1014	0.1110	0.1207	0.1503
50	0.0548	0.0591	0.0634	0.0679	0.0725	0.0771	0.0817	0.0865	0.0912	0.0960	0.1009	0.1106	0.1204	0.1501

Used to convert from PV to AV on an annual basis.

## Future Value of One Present Dollar (Annual)

PV to FV Annual

Years	Nominal Annual Rate of Interest (%)													
	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0500	1.0550	1.0600	1.0650	1.0700	1.0750	1.0800	1.0850	1.0900	1.0950	1.1000	1.1100	1.1200	1.1500
2	1.1025	1.1130	1.1236	1.1342	1.1449	1.1556	1.1664	1.1772	1.1881	1.1990	1.2100	1.2321	1.2544	1.3225
3	1.1576	1.1742	1.1910	1.2079	1.2250	1.2423	1.2597	1.2773	1.2950	1.3129	1.3310	1.3676	1.4049	1.5209
4	1.2155	1.2388	1.2625	1.2865	1.3108	1.3355	1.3605	1.3859	1.4116	1.4377	1.4641	1.5181	1.5735	1.7490
5	1.2763	1.3070	1.3382	1.3701	1.4026	1.4356	1.4693	1.5037	1.5386	1.5742	1.6105	1.6851	1.7623	2.0114
6	1.3401	1.3788	1.4185	1.4591	1.5007	1.5433	1.5869	1.6315	1.6771	1.7238	1.7716	1.8704	1.9738	2.3131
7	1.4071	1.4547	1.5036	1.5540	1.6058	1.6590	1.7138	1.7701	1.8280	1.8876	1.9487	2.0762	2.2107	2.6600
8	1.4775	1.5347	1.5938	1.6550	1.7182	1.7835	1.8509	1.9206	1.9926	2.0669	2.1436	2.3045	2.4760	3.0590
9	1.5513	1.6191	1.6895	1.7626	1.8385	1.9172	1.9990	2.0839	2.1719	2.2632	2.3579	2.5580	2.7731	3.5179
10	1.6289	1.7081	1.7908	1.8771	1.9672	2.0610	2.1589	2.2610	2.3674	2.4782	2.5937	2.8394	3.1058	4.0456
15	2.0789	2.2325	2.3966	2.5718	2.7590	2.9589	3.1722	3.3997	3.6425	3.9013	4.1772	4.7846	5.4736	8.1371
20	2.6533	2.9178	3.2071	3.5236	3.8697	4.2479	4.6610	5.1120	5.6044	6.1416	6.7275	8.0623	9.6463	16.3665
25	3.3864	3.8134	4.2919	4.8277	5.4274	6.0983	6.8485	7.6868	8.6231	9.6684	10.8347	13.5855	17.0001	32.9190
30	4.3219	4.9840	5.7435	6.6144	7.6123	8.7550	10.0627	11.5583	13.2677	15.2203	17.4494	22.8923	29.9599	66.2118
35	5.5160	6.5138	7.6861	9.0623	10.6766	12.5689	14.7853	17.3796	20.4140	23.9604	28.1024	38.5749	52.7996	133.1755
40	7.0400	8.5133	10.2857	12.4161	14.9745	18.0442	21.7245	26.1330	31.4094	37.7194	45.2593	65.0009	93.0510	267.8635
45	8.9850	11.1266	13.7646	17.0111	21.0025	25.9048	31.9204	39.2951	48.3273	59.3793	72.8905	109.5302	163.9876	538.7693
50	11.4674	14.5420	18.4202	23.3067	29.4570	37.1897	46.9016	59.0863	74.3575	93.4773	117.3909	184.5648	289.0022	1083.6574

Used to convert from PV to FV on an annual basis.

## Present Value of One Dollar per Year

AV to PV Annually

Years	Nominal Annual Rate of Interest (%)													
	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	0.9524	0.9479	0.9434	0.9390	0.9346	0.9302	0.9259	0.9217	0.9174	0.9132	0.9091	0.9009	0.8929	0.8696
2	1.8594	1.8463	1.8334	1.8206	1.8080	1.7956	1.7833	1.7711	1.7591	1.7473	1.7355	1.7125	1.6901	1.6257
3	2.7232	2.6979	2.6730	2.6485	2.6243	2.6005	2.5771	2.5540	2.5313	2.5089	2.4869	2.4437	2.4018	2.2832
4	3.5460	3.5052	3.4651	3.4258	3.3872	3.3493	3.3121	3.2756	3.2397	3.2045	3.1699	3.1024	3.0373	2.8550
5	4.3295	4.2703	4.2124	4.1557	4.1002	4.0459	3.9927	3.9406	3.8897	3.8397	3.7908	3.6959	3.6048	3.3522
6	5.0757	4.9955	4.9173	4.8410	4.7665	4.6938	4.6229	4.5536	4.4859	4.4198	4.3553	4.2305	4.1114	3.7845
7	5.7864	5.6830	5.5824	5.4845	5.3893	5.2966	5.2064	5.1185	5.0330	4.9496	4.8684	4.7122	4.5638	4.1604
8	6.4632	6.3346	6.2098	6.0888	5.9713	5.8573	5.7466	5.6392	5.5348	5.4334	5.3349	5.1461	4.9676	4.4873
9	7.1078	6.9522	6.8017	6.6561	6.5152	6.3789	6.2469	6.1191	5.9952	5.8753	5.7590	5.5370	5.3282	4.7716
10	7.7217	7.5376	7.3601	7.1888	7.0236	6.8641	6.7101	6.5613	6.4177	6.2788	6.1446	5.8892	5.6502	5.0188
15	10.3797	10.0376	9.7122	9.4027	9.1079	8.8271	8.5595	8.3042	8.0607	7.8282	7.6061	7.1909	6.8109	5.8474
20	12.4622	11.9504	11.4699	11.0185	10.5940	10.1945	9.8181	9.4633	9.1285	8.8124	8.5136	7.9633	7.4694	6.2593
25	14.0939	13.4139	12.7834	12.1979	11.6536	11.1469	10.6748	10.2342	9.8226	9.4376	9.0770	8.4217	7.8431	6.4641
30	15.3725	14.5337	13.7648	13.0587	12.4090	11.8104	11.2578	10.7468	10.2737	9.8347	9.4269	8.6938	8.0552	6.5660
35	16.3742	15.3906	14.4982	13.6870	12.9477	12.2725	11.6546	11.0878	10.5668	10.0870	9.6442	8.8552	8.1755	6.6166
40	17.1591	16.0461	15.0463	14.1455	13.3317	12.5944	11.9246	11.3145	10.7574	10.2472	9.7791	8.9511	8.2438	6.6418
45	17.7741	16.5477	15.4558	14.4802	13.6055	12.8186	12.1084	11.4653	10.8812	10.3490	9.8628	9.0079	8.2825	6.6543
50	18.2559	16.9315	15.7619	14.7245	13.8007	12.9748	12.2335	11.5656	10.9617	10.4137	9.9148	9.0417	8.3045	6.6605

Used to convert from AV to PV on an annual basis.

## Future Value of One Dollar per Year

AV to FV Annually

Years	Nominal Annual Rate of Interest (%)													
	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0500	2.0550	2.0600	2.0650	2.0700	2.0750	2.0800	2.0850	2.0900	2.0950	2.1000	2.1100	2.1200	2.1500
3	3.1525	3.1680	3.1836	3.1992	3.2149	3.2306	3.2464	3.2622	3.2781	3.2940	3.3100	3.3421	3.3744	3.4725
4	4.3101	4.3423	4.3746	4.4072	4.4399	4.4729	4.5061	4.5395	4.5731	4.6070	4.6410	4.7097	4.7793	4.9934
5	5.5256	5.5811	5.6371	5.6936	5.7507	5.8084	5.8666	5.9254	5.9847	6.0446	6.1051	6.2278	6.3528	6.7424
6	6.8019	6.8881	6.9753	7.0637	7.1533	7.2440	7.3359	7.4290	7.5233	7.6189	7.7156	7.9129	8.1152	8.7537
7	8.1420	8.2669	8.3938	8.5229	8.6540	8.7873	8.9228	9.0605	9.2004	9.3426	9.4872	9.7833	10.0890	11.0668
8	9.5491	9.7216	9.8975	10.0769	10.2598	10.4464	10.6366	10.8306	11.0285	11.2302	11.4359	11.8594	12.2997	13.7268
9	11.0266	11.2563	11.4913	11.7319	11.9780	12.2298	12.4876	12.7512	13.0210	13.2971	13.5795	14.1640	14.7757	16.7858
10	12.5779	12.8754	13.1808	13.4944	13.8164	14.1471	14.4866	14.8351	15.1929	15.5603	15.9374	16.7220	17.5487	20.3037
15	21.5786	22.4087	23.2760	24.1822	25.1290	26.1184	27.1521	28.2323	29.3609	30.5402	31.7725	34.4054	37.2797	47.5804
20	33.0660	34.8683	36.7856	38.8253	40.9955	43.3047	45.7620	48.3770	51.1601	54.1222	57.2750	64.2028	72.0524	102.4436
25	47.7271	51.1526	54.8645	58.8877	63.2490	67.9779	73.1059	78.6678	84.7009	91.2459	98.3471	114.4133	133.3339	212.7930
30	66.4388	72.4355	79.0582	86.3749	94.4608	103.3994	113.2832	124.2147	136.3075	149.6875	164.4940	199.0209	241.3327	434.7451
35	90.3203	100.2514	111.4348	124.0347	138.2369	154.2516	172.3168	192.7017	215.7108	241.6885	271.0244	341.5896	431.6635	881.1702
40	120.7998	136.6056	154.7620	175.6319	199.6351	227.2565	259.0565	295.6825	337.8824	386.5200	442.5926	581.8261	767.0914	1779.0903
45	159.7002	184.1192	212.7435	246.3246	285.7493	332.0645	386.5056	450.5304	525.8587	614.5194	718.9048	986.6386	1358.2300	3585.1285
50	209.3480	246.2175	290.3359	343.1797	406.5289	482.5299	573.7702	683.3684	815.0836	973.4448	1163.9085	1668.7712	2400.0182	7217.7163

Used to convert from AV to FV on an annual basis.

## Present Value of One Future Dollar (Annual)

FV to PV Annual

Years	Nominal Annual Rate of Interest (%)													
	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	0.9524	0.9479	0.9434	0.9390	0.9346	0.9302	0.9259	0.9217	0.9174	0.9132	0.9091	0.9009	0.8929	0.8696
2	0.9070	0.8985	0.8900	0.8817	0.8734	0.8653	0.8573	0.8495	0.8417	0.8340	0.8264	0.8116	0.7972	0.7561
3	0.8638	0.8516	0.8396	0.8278	0.8163	0.8050	0.7938	0.7829	0.7722	0.7617	0.7513	0.7312	0.7118	0.6575
4	0.8227	0.8072	0.7921	0.7773	0.7629	0.7488	0.7350	0.7216	0.7084	0.6956	0.6830	0.6587	0.6355	0.5718
5	0.7835	0.7651	0.7473	0.7299	0.7130	0.6966	0.6806	0.6650	0.6499	0.6352	0.6209	0.5935	0.5674	0.4972
6	0.7462	0.7252	0.7050	0.6853	0.6663	0.6480	0.6302	0.6129	0.5963	0.5801	0.5645	0.5346	0.5066	0.4323
7	0.7107	0.6874	0.6651	0.6435	0.6227	0.6028	0.5835	0.5649	0.5470	0.5298	0.5132	0.4817	0.4523	0.3759
8	0.6768	0.6516	0.6274	0.6042	0.5820	0.5607	0.5403	0.5207	0.5019	0.4838	0.4665	0.4339	0.4039	0.3269
9	0.6446	0.6176	0.5919	0.5674	0.5439	0.5216	0.5002	0.4799	0.4604	0.4418	0.4241	0.3909	0.3606	0.2843
10	0.6139	0.5854	0.5584	0.5327	0.5083	0.4852	0.4632	0.4423	0.4224	0.4035	0.3855	0.3522	0.3220	0.2472
15	0.4810	0.4479	0.4173	0.3888	0.3624	0.3380	0.3152	0.2941	0.2745	0.2563	0.2394	0.2090	0.1827	0.1229
20	0.3769	0.3427	0.3118	0.2838	0.2584	0.2354	0.2145	0.1956	0.1784	0.1628	0.1486	0.1240	0.1037	0.0611
25	0.2953	0.2622	0.2330	0.2071	0.1842	0.1640	0.1460	0.1301	0.1160	0.1034	0.0923	0.0736	0.0588	0.0304
30	0.2314	0.2006	0.1741	0.1512	0.1314	0.1142	0.0994	0.0865	0.0754	0.0657	0.0573	0.0437	0.0334	0.0151
35	0.1813	0.1535	0.1301	0.1103	0.0937	0.0796	0.0676	0.0575	0.0490	0.0417	0.0356	0.0259	0.0189	0.0075
40	0.1420	0.1175	0.0972	0.0805	0.0668	0.0554	0.0460	0.0383	0.0318	0.0265	0.0221	0.0154	0.0107	0.0037
45	0.1113	0.0899	0.0727	0.0588	0.0476	0.0386	0.0313	0.0254	0.0207	0.0168	0.0137	0.0091	0.0061	0.0019
50	0.0872	0.0688	0.0543	0.0429	0.0339	0.0269	0.0213	0.0169	0.0134	0.0107	0.0085	0.0054	0.0035	0.0009

Used to convert from FV to PV on an annual basis.

## Annual Value of One Future Dollar

FV to AV Annually

Years	Nominal Annual Rate of Interest (%)													
	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.4878	0.4866	0.4854	0.4843	0.4831	0.4819	0.4808	0.4796	0.4785	0.4773	0.4762	0.4739	0.4717	0.4651
3	0.3172	0.3157	0.3141	0.3126	0.3111	0.3095	0.3080	0.3065	0.3051	0.3036	0.3021	0.2992	0.2963	0.2880
4	0.2320	0.2303	0.2286	0.2269	0.2252	0.2236	0.2219	0.2203	0.2187	0.2171	0.2155	0.2123	0.2092	0.2003
5	0.1810	0.1792	0.1774	0.1756	0.1739	0.1722	0.1705	0.1688	0.1671	0.1654	0.1638	0.1606	0.1574	0.1483
6	0.1470	0.1452	0.1434	0.1416	0.1398	0.1380	0.1363	0.1346	0.1329	0.1313	0.1296	0.1264	0.1232	0.1142
7	0.1228	0.1210	0.1191	0.1173	0.1156	0.1138	0.1121	0.1104	0.1087	0.1070	0.1054	0.1022	0.0991	0.0904
8	0.1047	0.1029	0.1010	0.0992	0.0975	0.0957	0.0940	0.0923	0.0907	0.0890	0.0874	0.0843	0.0813	0.0729
9	0.0907	0.0888	0.0870	0.0852	0.0835	0.0818	0.0801	0.0784	0.0768	0.0752	0.0736	0.0706	0.0677	0.0596
10	0.0795	0.0777	0.0759	0.0741	0.0724	0.0707	0.0690	0.0674	0.0658	0.0643	0.0627	0.0598	0.0570	0.0493
15	0.0463	0.0446	0.0430	0.0414	0.0398	0.0383	0.0368	0.0354	0.0341	0.0327	0.0315	0.0291	0.0268	0.0210
20	0.0302	0.0287	0.0272	0.0258	0.0244	0.0231	0.0219	0.0207	0.0195	0.0185	0.0175	0.0156	0.0139	0.0098
25	0.0210	0.0195	0.0182	0.0170	0.0158	0.0147	0.0137	0.0127	0.0118	0.0110	0.0102	0.0087	0.0075	0.0047
30	0.0151	0.0138	0.0126	0.0116	0.0106	0.0097	0.0088	0.0081	0.0073	0.0067	0.0061	0.0050	0.0041	0.0023
35	0.0111	0.0100	0.0090	0.0081	0.0072	0.0065	0.0058	0.0052	0.0046	0.0041	0.0037	0.0029	0.0023	0.0011
40	0.0083	0.0073	0.0065	0.0057	0.0050	0.0044	0.0039	0.0034	0.0030	0.0026	0.0023	0.0017	0.0013	0.0006
45	0.0063	0.0054	0.0047	0.0041	0.0035	0.0030	0.0026	0.0022	0.0019	0.0016	0.0014	0.0010	0.0007	0.0003
50	0.0048	0.0041	0.0034	0.0029	0.0025	0.0021	0.0017	0.0015	0.0012	0.0010	0.0009	0.0006	0.0004	0.0001

Used to convert from FV to AV on an annual basis.

# Monthly Payment per Dollar Borrowed

# PV to PMT Monthly

Nominal Annual Rate of Interest (%)

Months	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.00417	1.00458	1.00500	1.00542	1.00583	1.00625	1.00667	1.00708	1.00750	1.00792	1.00833	1.00917	1.01000	1.01250
2	0.50313	0.50344	0.50375	0.50407	0.50438	0.50469	0.50501	0.50532	0.50563	0.50595	0.50626	0.50689	0.50751	0.50939
3	0.33611	0.33639	0.33667	0.33695	0.33723	0.33751	0.33779	0.33807	0.33835	0.33862	0.33890	0.33946	0.34002	0.34170
4	0.25261	0.25287	0.25313	0.25339	0.25366	0.25392	0.25418	0.25444	0.25471	0.25497	0.25523	0.25576	0.25628	0.25786
5	0.20251	0.20276	0.20301	0.20326	0.20351	0.20377	0.20402	0.20427	0.20452	0.20477	0.20503	0.20553	0.20604	0.20756
6	0.16911	0.16935	0.16960	0.16984	0.17009	0.17033	0.17058	0.17082	0.17107	0.17132	0.17156	0.17205	0.17255	0.17403
7	0.14525	0.14549	0.14573	0.14597	0.14621	0.14645	0.14669	0.14693	0.14717	0.14742	0.14766	0.14814	0.14863	0.15009
8	0.12736	0.12759	0.12783	0.12807	0.12830	0.12854	0.12878	0.12902	0.12926	0.12949	0.12973	0.13021	0.13069	0.13213
9	0.11344	0.11367	0.11391	0.11414	0.11438	0.11461	0.11485	0.11508	0.11532	0.11556	0.11579	0.11627	0.11674	0.11817
10	0.10231	0.10254	0.10277	0.10300	0.10324	0.10347	0.10370	0.10394	0.10417	0.10441	0.10464	0.10511	0.10558	0.10700
11	0.09320	0.09343	0.09366	0.09389	0.09412	0.09435	0.09459	0.09482	0.09505	0.09528	0.09552	0.09599	0.09645	0.09787
12	0.08561	0.08584	0.08607	0.08630	0.08653	0.08676	0.08699	0.08722	0.08745	0.08768	0.08792	0.08838	0.08885	0.09026
13	0.07919	0.07941	0.07964	0.07987	0.08010	0.08033	0.08056	0.08079	0.08102	0.08125	0.08148	0.08195	0.08241	0.08382
14	0.07368	0.07391	0.07414	0.07436	0.07459	0.07482	0.07505	0.07528	0.07551	0.07574	0.07597	0.07644	0.07690	0.07831
15	0.06891	0.06914	0.06936	0.06959	0.06982	0.07005	0.07028	0.07051	0.07074	0.07097	0.07120	0.07166	0.07212	0.07353
16	0.06474	0.06496	0.06519	0.06542	0.06564	0.06587	0.06610	0.06633	0.06656	0.06679	0.06702	0.06748	0.06794	0.06935
17	0.06105	0.06128	0.06151	0.06173	0.06196	0.06219	0.06242	0.06264	0.06287	0.06310	0.06333	0.06379	0.06426	0.06566
18	0.05778	0.05801	0.05823	0.05846	0.05868	0.05891	0.05914	0.05937	0.05960	0.05983	0.06006	0.06052	0.06098	0.06238
19	0.05485	0.05508	0.05530	0.05553	0.05576	0.05598	0.05621	0.05644	0.05667	0.05690	0.05713	0.05759	0.05805	0.05946
20	0.05222	0.05244	0.05267	0.05289	0.05312	0.05335	0.05357	0.05380	0.05403	0.05426	0.05449	0.05495	0.05542	0.05682
21	0.04983	0.05006	0.05028	0.05051	0.05073	0.05096	0.05119	0.05142	0.05165	0.05187	0.05210	0.05257	0.05303	0.05444
22	0.04766	0.04789	0.04811	0.04834	0.04857	0.04879	0.04902	0.04925	0.04948	0.04971	0.04994	0.05040	0.05086	0.05227
23	0.04569	0.04591	0.04613	0.04636	0.04659	0.04681	0.04704	0.04727	0.04750	0.04773	0.04796	0.04842	0.04889	0.05030
24	0.04387	0.04410	0.04432	0.04455	0.04477	0.04500	0.04523	0.04546	0.04568	0.04591	0.04614	0.04661	0.04707	0.04849
25	0.04220	0.04243	0.04265	0.04288	0.04310	0.04333	0.04356	0.04379	0.04402	0.04425	0.04448	0.04494	0.04541	0.04682
26	0.04066	0.04089	0.04111	0.04134	0.04156	0.04179	0.04202	0.04225	0.04248	0.04271	0.04294	0.04340	0.04387	0.04529
27	0.03924	0.03946	0.03969	0.03991	0.04014	0.04037	0.04059	0.04082	0.04105	0.04128	0.04151	0.04198	0.04245	0.04387
28	0.03791	0.03814	0.03836	0.03859	0.03881	0.03904	0.03927	0.03950	0.03973	0.03996	0.04019	0.04066	0.04112	0.04255
29	0.03668	0.03690	0.03713	0.03736	0.03758	0.03781	0.03804	0.03827	0.03850	0.03873	0.03896	0.03943	0.03990	0.04132
30	0.03553	0.03575	0.03598	0.03620	0.03643	0.03666	0.03689	0.03712	0.03735	0.03758	0.03781	0.03828	0.03875	0.04018
31	0.03445	0.03468	0.03490	0.03513	0.03536	0.03558	0.03581	0.03604	0.03627	0.03651	0.03674	0.03720	0.03768	0.03911
32	0.03344	0.03367	0.03389	0.03412	0.03435	0.03458	0.03481	0.03504	0.03527	0.03550	0.03573	0.03620	0.03667	0.03811
33	0.03250	0.03272	0.03295	0.03317	0.03340	0.03363	0.03386	0.03409	0.03432	0.03455	0.03479	0.03525	0.03573	0.03717
34	0.03161	0.03183	0.03206	0.03228	0.03251	0.03274	0.03297	0.03320	0.03343	0.03366	0.03390	0.03437	0.03484	0.03628
35	0.03076	0.03099	0.03122	0.03144	0.03167	0.03190	0.03213	0.03236	0.03259	0.03282	0.03306	0.03353	0.03400	0.03545
36	0.02997	0.03020	0.03042	0.03065	0.03088	0.03111	0.03134	0.03157	0.03180	0.03203	0.03227	0.03274	0.03321	0.03467

Years	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
4	0.02303	0.02326	0.02349	0.02371	0.02395	0.02418	0.02441	0.02465	0.02489	0.02512	0.02536	0.02585	0.02633	0.02783
5	0.01887	0.01910	0.01933	0.01957	0.01980	0.02004	0.02028	0.02052	0.02076	0.02100	0.02125	0.02174	0.02224	0.02379
10	0.01061	0.01085	0.01110	0.01135	0.01161	0.01187	0.01213	0.01240	0.01267	0.01294	0.01322	0.01378	0.01435	0.01613
15	0.00791	0.00817	0.00844	0.00871	0.00899	0.00927	0.00956	0.00985	0.01014	0.01044	0.01075	0.01137	0.01200	0.01400
20	0.00660	0.00688	0.00716	0.00746	0.00775	0.00806	0.00836	0.00868	0.00900	0.00932	0.00965	0.01032	0.01101	0.01317
25	0.00585	0.00614	0.00644	0.00675	0.00707	0.00739	0.00772	0.00805	0.00839	0.00874	0.00909	0.00980	0.01053	0.01281
30	0.00537	0.00568	0.00600	0.00632	0.00665	0.00699	0.00734	0.00769	0.00805	0.00841	0.00878	0.00952	0.01029	0.01264

Used to convert from PV to PMT on a monthly basis.

# Future Value of One Present Dollar

# PV to FV Monthly

Nominal Annual Rate of Interest (%)

Months	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0042	1.0046	1.0050	1.0054	1.0058	1.0063	1.0067	1.0071	1.0075	1.0079	1.0083	1.0092	1.0100	1.0125
2	1.0084	1.0092	1.0100	1.0109	1.0117	1.0125	1.0134	1.0142	1.0151	1.0159	1.0167	1.0184	1.0201	1.0252
3	1.0126	1.0138	1.0151	1.0163	1.0176	1.0189	1.0201	1.0214	1.0227	1.0239	1.0252	1.0278	1.0303	1.0380
4	1.0168	1.0185	1.0202	1.0218	1.0235	1.0252	1.0269	1.0286	1.0303	1.0320	1.0338	1.0372	1.0406	1.0509
5	1.0210	1.0231	1.0253	1.0274	1.0295	1.0316	1.0338	1.0359	1.0381	1.0402	1.0424	1.0467	1.0510	1.0641
6	1.0253	1.0278	1.0304	1.0329	1.0355	1.0381	1.0407	1.0433	1.0459	1.0485	1.0511	1.0563	1.0615	1.0774
7	1.0295	1.0325	1.0355	1.0385	1.0416	1.0446	1.0476	1.0506	1.0537	1.0568	1.0598	1.0660	1.0721	1.0909
8	1.0338	1.0373	1.0407	1.0442	1.0476	1.0511	1.0546	1.0581	1.0616	1.0651	1.0686	1.0757	1.0829	1.1045
9	1.0381	1.0420	1.0459	1.0498	1.0537	1.0577	1.0616	1.0656	1.0696	1.0735	1.0775	1.0856	1.0937	1.1183
10	1.0425	1.0468	1.0511	1.0555	1.0599	1.0643	1.0687	1.0731	1.0776	1.0820	1.0865	1.0955	1.1046	1.1323
11	1.0468	1.0516	1.0564	1.0612	1.0661	1.0709	1.0758	1.0807	1.0857	1.0906	1.0956	1.1056	1.1157	1.1464
12	1.0512	1.0564	1.0617	1.0670	1.0723	1.0776	1.0830	1.0884	1.0938	1.0992	1.1047	1.1157	1.1268	1.1608
13	1.0555	1.0612	1.0670	1.0728	1.0785	1.0844	1.0902	1.0961	1.1020	1.1079	1.1139	1.1259	1.1381	1.1753
14	1.0599	1.0661	1.0723	1.0786	1.0848	1.0911	1.0975	1.1039	1.1103	1.1167	1.1232	1.1363	1.1495	1.1900
15	1.0644	1.0710	1.0777	1.0844	1.0912	1.0980	1.1048	1.1117	1.1186	1.1256	1.1326	1.1467	1.1610	1.2048
16	1.0688	1.0759	1.0831	1.0903	1.0975	1.1048	1.1122	1.1196	1.1270	1.1345	1.1420	1.1572	1.1726	1.2199
17	1.0732	1.0808	1.0885	1.0962	1.1039	1.1117	1.1196	1.1275	1.1354	1.1435	1.1515	1.1678	1.1843	1.2351
18	1.0777	1.0858	1.0939	1.1021	1.1104	1.1187	1.1270	1.1355	1.1440	1.1525	1.1611	1.1785	1.1961	1.2506
19	1.0822	1.0908	1.0994	1.1081	1.1168	1.1257	1.1346	1.1435	1.1525	1.1616	1.1708	1.1893	1.2081	1.2662
20	1.0867	1.0958	1.1049	1.1141	1.1234	1.1327	1.1421	1.1516	1.1612	1.1708	1.1805	1.2002	1.2202	1.2820
21	1.0912	1.1008	1.1104	1.1201	1.1299	1.1398	1.1497	1.1598	1.1699	1.1801	1.1904	1.2112	1.2324	1.2981
22	1.0958	1.1058	1.1160	1.1262	1.1365	1.1469	1.1574	1.1680	1.1787	1.1894	1.2003	1.2223	1.2447	1.3143
23	1.1004	1.1109	1.1216	1.1323	1.1431	1.1541	1.1651	1.1763	1.1875	1.1989	1.2103	1.2335	1.2572	1.3307
24	1.1049	1.1160	1.1272	1.1384	1.1498	1.1613	1.1729	1.1846	1.1964	1.2083	1.2204	1.2448	1.2697	1.3474
25	1.1095	1.1211	1.1328	1.1446	1.1565	1.1686	1.1807	1.1930	1.2054	1.2179	1.2306	1.2562	1.2824	1.3642
26	1.1142	1.1263	1.1385	1.1508	1.1633	1.1759	1.1886	1.2014	1.2144	1.2276	1.2408	1.2678	1.2953	1.3812
27	1.1188	1.1314	1.1442	1.1570	1.1700	1.1832	1.1965	1.2099	1.2235	1.2373	1.2512	1.2794	1.3082	1.3985
28	1.1235	1.1366	1.1499	1.1633	1.1769	1.1906	1.2045	1.2185	1.2327	1.2471	1.2616	1.2911	1.3213	1.4160
29	1.1282	1.1418	1.1556	1.1696	1.1837	1.1980	1.2125	1.2271	1.2420	1.2569	1.2721	1.3029	1.3345	1.4337
30	1.1329	1.1470	1.1614	1.1759	1.1906	1.2055	1.2206	1.2358	1.2513	1.2669	1.2827	1.3149	1.3478	1.4516
31	1.1376	1.1523	1.1672	1.1823	1.1976	1.2131	1.2287	1.2446	1.2607	1.2769	1.2934	1.3269	1.3613	1.4698
32	1.1423	1.1576	1.1730	1.1887	1.2046	1.2206	1.2369	1.2534	1.2701	1.2870	1.3042	1.3391	1.3749	1.4881
33	1.1471	1.1629	1.1789	1.1951	1.2116	1.2283	1.2452	1.2623	1.2796	1.2972	1.3150	1.3514	1.3887	1.5067
34	1.1519	1.1682	1.1848	1.2016	1.2187	1.2359	1.2535	1.2712	1.2892	1.3075	1.3260	1.3638	1.4026	1.5256
35	1.1567	1.1736	1.1907	1.2081	1.2258	1.2437	1.2618	1.2802	1.2989	1.3178	1.3370	1.3763	1.4166	1.5446
36	1.1615	1.1789	1.1967	1.2147	1.2329	1.2514	1.2702	1.2893	1.3086	1.3283	1.3482	1.3889	1.4308	1.5639

Years	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
4	1.2209	1.2455	1.2705	1.2960	1.3221	1.3486	1.3757	1.4033	1.4314	1.4601	1.4894	1.5496	1.6122	1.8154
5	1.2834	1.3157	1.3489	1.3828	1.4176	1.4533	1.4898	1.5273	1.5657	1.6050	1.6453	1.7289	1.8167	2.1072
10	1.6470	1.7311	1.8194	1.9122	2.0097	2.1121	2.2196	2.3326	2.4514	2.5761	2.7070	2.9891	3.3004	4.4402
15	2.1137	2.2776	2.4541	2.6442	2.8489	3.0695	3.3069	3.5627	3.8380	4.1346	4.4539	5.1680	5.9958	9.3563
20	2.7126	2.9966	3.3102	3.6564	4.0387	4.4608	4.9268	5.4412	6.0092	6.6361	7.3281	8.9350	10.8926	19.7155
25	3.4813	3.9427	4.4650	5.0562	5.7254	6.4829	7.3402	8.3104	9.4084	10.6509	12.0569	15.4479	19.7885	41.5441
30	4.4677	5.1874	6.0226	6.9918	8.1165	9.4215	10.9357	12.6925	14.7306	17.0949	19.8374	26.7081	35.9496	87.5410

Used to convert from PV to FV on a monthly basis.

# Present Value of One Dollar Per Month

PMT to PV Monthly

Nominal Annual Rate of Interest (%)

Months	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	0.9959	0.9954	0.9950	0.9946	0.9942	0.9938	0.9934	0.9930	0.9926	0.9921	0.9917	0.9909	0.9901	0.9877
2	1.9876	1.9863	1.9851	1.9839	1.9826	1.9814	1.9802	1.9789	1.9777	1.9765	1.9753	1.9728	1.9704	1.9631
3	2.9752	2.9727	2.9702	2.9678	2.9653	2.9629	2.9604	2.9580	2.9556	2.9531	2.9507	2.9458	2.9410	2.9265
4	3.9587	3.9546	3.9505	3.9464	3.9423	3.9383	3.9342	3.9302	3.9261	3.9221	3.9180	3.9100	3.9020	3.8781
5	4.9381	4.9320	4.9259	4.9198	4.9137	4.9076	4.9015	4.8955	4.8894	4.8834	4.8774	4.8654	4.8534	4.8178
6	5.9135	5.9049	5.8964	5.8879	5.8794	5.8709	5.8625	5.8540	5.8456	5.8372	5.8288	5.8121	5.7955	5.7460
7	6.8848	6.8734	6.8621	6.8508	6.8395	6.8282	6.8170	6.8058	6.7946	6.7835	6.7724	6.7502	6.7282	6.6627
8	7.8521	7.8375	7.8230	7.8085	7.7940	7.7796	7.7652	7.7509	7.7366	7.7224	7.7081	7.6798	7.6517	7.5681
9	8.8153	8.7972	8.7791	8.7610	8.7430	8.7251	8.7072	8.6894	8.6716	8.6539	8.6362	8.6010	8.5660	8.4623
10	9.7746	9.7525	9.7304	9.7084	9.6865	9.6647	9.6429	9.6212	9.5996	9.5780	9.5565	9.5138	9.4713	9.3455
11	10.7299	10.7034	10.6770	10.6507	10.6245	10.5984	10.5724	10.5465	10.5207	10.4949	10.4693	10.4183	10.3676	10.2178
12	11.6812	11.6500	11.6189	11.5880	11.5571	11.5264	11.4958	11.4653	11.4349	11.4047	11.3745	11.3146	11.2551	11.0793
13	12.6286	12.5923	12.5562	12.5201	12.4843	12.4486	12.4130	12.3776	12.3423	12.3072	12.2722	12.2027	12.1337	11.9302
14	13.5721	13.5303	13.4887	13.4473	13.4061	13.3651	13.3242	13.2835	13.2430	13.2027	13.1626	13.0828	13.0037	12.7706
15	14.5116	14.4640	14.4166	14.3695	14.3225	14.2758	14.2293	14.1831	14.1370	14.0911	14.0455	13.9549	13.8651	13.6005
16	15.4472	15.3934	15.3399	15.2867	15.2337	15.1810	15.1285	15.0763	15.0243	14.9726	14.9212	14.8190	14.7179	14.4203
17	16.3790	16.3186	16.2586	16.1989	16.1395	16.0804	16.0217	15.9632	15.9050	15.8472	15.7896	15.6753	15.5623	15.2299
18	17.3069	17.2396	17.1728	17.1063	17.0401	16.9744	16.9089	16.8439	16.7792	16.7148	16.6508	16.5239	16.3983	16.0295
19	18.2309	18.1564	18.0824	18.0087	17.9355	17.8627	17.7903	17.7184	17.6468	17.5757	17.5050	17.3647	17.2260	16.8193
20	19.1511	19.0690	18.9874	18.9063	18.8257	18.7456	18.6659	18.5867	18.5080	18.4298	18.3520	18.1979	18.0456	17.5993
21	20.0675	19.9775	19.8880	19.7991	19.7107	19.6229	19.5357	19.4490	19.3628	19.2772	19.1921	19.0235	18.8570	18.3697
22	20.9801	20.8817	20.7841	20.6870	20.5906	20.4948	20.3997	20.3051	20.2112	20.1179	20.0252	19.8416	19.6604	19.1306
23	21.8889	21.7819	21.6757	21.5702	21.4654	21.3613	21.2579	21.1553	21.0533	20.9520	20.8514	20.6523	20.4558	19.8820
24	22.7939	22.6780	22.5629	22.4486	22.3351	22.2224	22.1105	21.9995	21.8891	21.7796	21.6709	21.4556	21.2434	20.6242
25	23.6952	23.5699	23.4456	23.3222	23.1998	23.0782	22.9575	22.8377	22.7188	22.6007	22.4835	22.2516	22.0232	21.3573
26	24.5927	24.4578	24.3240	24.1912	24.0594	23.9286	23.7988	23.6700	23.5422	23.4153	23.2894	23.0404	22.7952	22.0813
27	25.4865	25.3417	25.1980	25.0555	24.9141	24.7738	24.6346	24.4965	24.3595	24.2236	24.0887	23.8221	23.5596	22.7963
28	26.3766	26.2215	26.0677	25.9151	25.7638	25.6137	25.4648	25.3172	25.1707	25.0254	24.8813	24.5966	24.3164	23.5025
29	27.2630	27.0973	26.9330	26.7701	26.6086	26.4484	26.2896	26.1321	25.9759	25.8210	25.6674	25.3641	25.0658	24.2000
30	28.1457	27.9691	27.7941	27.6205	27.4485	27.2779	27.1088	26.9412	26.7751	26.6104	26.4470	26.1246	25.8077	24.8889
31	29.0248	28.8370	28.6508	28.4663	28.2835	28.1023	27.9227	27.7447	27.5683	27.3935	27.2202	26.8782	26.5423	25.5693
32	29.9002	29.7008	29.5033	29.3076	29.1137	28.9215	28.7312	28.5425	28.3557	28.1705	27.9870	27.6250	27.2696	26.2413
33	30.7720	30.5608	30.3515	30.1443	29.9390	29.7357	29.5343	29.3348	29.1371	28.9414	28.7474	28.3650	27.9897	26.9050
34	31.6402	31.4168	31.1955	30.9765	30.7596	30.5448	30.3320	30.1214	29.9128	29.7062	29.5016	29.0983	28.7027	27.5605
35	32.5047	32.2689	32.0354	31.8042	31.5754	31.3488	31.1246	30.9025	30.6827	30.4650	30.2495	29.8249	29.4086	28.2079
36	33.3657	33.1171	32.8710	32.6275	32.3865	32.1479	31.9118	31.6781	31.4468	31.2179	30.9912	30.5449	30.1075	28.8473

Years	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
4	43.4230	42.9988	42.5803	42.1675	41.7602	41.3584	40.9619	40.5707	40.1848	39.8039	39.4282	38.6914	37.9740	35.9315
5	52.9907	52.3528	51.7256	51.1087	50.5020	49.9053	49.3184	48.7412	48.1734	47.6148	47.0654	45.9930	44.9550	42.0346
10	94.2814	92.1436	90.0735	88.0685	86.1264	84.2447	82.4215	80.6545	78.9417	77.2812	75.6712	72.5953	69.7005	61.9828
15	126.4552	122.3865	118.5035	114.7964	111.2560	107.8734	104.6406	101.5497	98.5934	95.7648	93.0574	87.9819	83.3217	71.4496
20	151.5253	145.3726	139.5808	134.1250	128.9825	124.1321	119.5543	115.2308	111.1450	107.2810	103.6246	96.8815	90.8194	75.9423
25	171.0600	162.8432	155.2069	148.1027	141.4869	135.3196	129.5645	124.1886	119.1616	114.4562	110.0472	102.0290	94.9466	78.0743
30	186.2816	176.1218	166.7916	158.2108	150.3076	143.0176	136.2835	130.0536	124.2819	118.9267	113.9508	105.0063	97.2183	79.0861

Used to convert from PMT to PV on a monthly basis.

# Future Value of One Dollar Per Month

PMT to FV Monthly

Nominal Annual Rate of Interest (%)

Months	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0042	2.0046	2.0050	2.0054	2.0058	2.0063	2.0067	2.0071	2.0075	2.0079	2.0083	2.0092	2.0100	2.0125
3	3.0125	3.0138	3.0150	3.0163	3.0175	3.0188	3.0200	3.0213	3.0226	3.0238	3.0251	3.0276	3.0301	3.0377
4	4.0251	4.0276	4.0301	4.0326	4.0351	4.0377	4.0402	4.0427	4.0452	4.0478	4.0503	4.0553	4.0604	4.0756
5	5.0418	5.0460	5.0503	5.0545	5.0587	5.0629	5.0671	5.0713	5.0756	5.0798	5.0840	5.0925	5.1010	5.1266
6	6.0628	6.0692	6.0755	6.0818	6.0882	6.0945	6.1009	6.1073	6.1136	6.1200	6.1264	6.1392	6.1520	6.1907
7	7.0881	7.0970	7.1059	7.1148	7.1237	7.1326	7.1416	7.1505	7.1595	7.1685	7.1775	7.1955	7.2135	7.2680
8	8.1176	8.1295	8.1414	8.1533	8.1653	8.1772	8.1892	8.2012	8.2132	8.2252	8.2373	8.2614	8.2857	8.3589
9	9.1515	9.1668	9.1821	9.1975	9.2129	9.2283	9.2438	9.2593	9.2748	9.2903	9.3059	9.3372	9.3685	9.4634
10	10.1896	10.2088	10.2280	10.2473	10.2666	10.2860	10.3054	10.3248	10.3443	10.3639	10.3835	10.4227	10.4622	10.5817
11	11.2321	11.2556	11.2792	11.3028	11.3265	11.3503	11.3741	11.3980	11.4219	11.4459	11.4700	11.5183	11.5668	11.7139
12	12.2789	12.3072	12.3356	12.3640	12.3926	12.4212	12.4499	12.4787	12.5076	12.5365	12.5656	12.6239	12.6825	12.8604
13	13.3300	13.3636	13.3972	13.4310	13.4649	13.4988	13.5329	13.5671	13.6014	13.6358	13.6703	13.7396	13.8093	14.0211
14	14.3856	14.4248	14.4642	14.5038	14.5434	14.5832	14.6231	14.6632	14.7034	14.7437	14.7842	14.8655	14.9474	15.1964
15	15.4455	15.4909	15.5365	15.5823	15.6283	15.6744	15.7206	15.7671	15.8137	15.8605	15.9074	16.0018	16.0969	16.3863
16	16.5099	16.5619	16.6142	16.6667	16.7194	16.7723	16.8254	16.8788	16.9323	16.9860	17.0400	17.1485	17.2579	17.5912
17	17.5786	17.6378	17.6973	17.7570	17.8170	17.8772	17.9376	17.9983	18.0593	18.1205	18.1820	18.3057	18.4304	18.8111
18	18.6519	18.7187	18.7858	18.8532	18.9209	18.9889	19.0572	19.1258	19.1947	19.2639	19.3335	19.4735	19.6147	20.0462
19	19.7296	19.8045	19.8797	19.9553	20.0313	20.1076	20.1842	20.2613	20.3387	20.4165	20.4946	20.6520	20.8109	21.2968
20	20.8118	20.8953	20.9791	21.0634	21.1481	21.2332	21.3188	21.4048	21.4912	21.5781	21.6654	21.8413	22.0190	22.5630
21	21.8985	21.9910	22.0840	22.1775	22.2715	22.3659	22.4609	22.5564	22.6524	22.7489	22.8459	23.0415	23.2392	23.8450
22	22.9898	23.0918	23.1944	23.2976	23.4014	23.5057	23.6107	23.7162	23.8223	23.9290	24.0363	24.2527	24.4716	25.1431
23	24.0856	24.1977	24.3104	24.4238	24.5379	24.6526	24.7681	24.8842	25.0010	25.1184	25.2366	25.4750	25.7163	26.4574
24	25.1859	25.3086	25.4320	25.5561	25.6810	25.8067	25.9332	26.0604	26.1885	26.3173	26.4469	26.7086	26.9735	27.7881
25	26.2909	26.4246	26.5591	26.6945	26.8308	26.9680	27.1061	27.2450	27.3849	27.5256	27.6673	27.9534	28.2432	29.1354
26	27.4004	27.5457	27.6919	27.8391	27.9874	28.1366	28.2868	28.4380	28.5903	28.7436	28.8979	29.2096	29.5256	30.4996
27	28.5146	28.6719	28.8304	28.9899	29.1506	29.3124	29.4754	29.6395	29.8047	29.9711	30.1387	30.4774	30.8209	31.8809
28	29.6334	29.8033	29.9745	30.1470	30.3207	30.4956	30.6719	30.8494	31.0282	31.2084	31.3898	31.7568	32.1291	33.2794
29	30.7569	30.9399	31.1244	31.3103	31.4975	31.6862	31.8763	32.0679	32.2609	32.4554	32.6514	33.0479	33.4504	34.6954
30	31.8850	32.0817	32.2800	32.4799	32.6813	32.8843	33.0889	33.2951	33.5029	33.7124	33.9235	34.3508	34.7849	36.1291
31	33.0179	33.2288	33.4414	33.6558	33.8719	34.0898	34.3094	34.5309	34.7542	34.9793	35.2062	35.6657	36.1327	37.5807
32	34.1554	34.3811	34.6086	34.8381	35.0695	35.3028	35.5382	35.7755	36.0148	36.2562	36.4996	36.9926	37.4941	39.0504
33	35.2978	35.5387	35.7817	36.0268	36.2741	36.5235	36.7751	37.0289	37.2849	37.5432	37.8038	38.3317	38.8690	40.5386
34	36.4448	36.7015	36.9606	37.2219	37.4857	37.7518	38.0203	38.2912	38.5646	38.8404	39.1188	39.6831	40.2577	42.0453
35	37.5967	37.8698	38.1454	38.4236	38.7043	38.9877	39.2737	39.5624	39.8538	40.1479	40.4448	41.0469	41.6603	43.5709
36	38.7533	39.0433	39.3361	39.6317	39.9301	40.2314	40.5356	40.8427	41.1527	41.4658	41.7818	42.4231	43.0769	45.1155

Years	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
4	53.0149	53.5529	54.0978	54.6499	55.2092	55.7759	56.3499	56.9315	57.5207	58.1177	58.7225	59.9562	61.2226	65.2284
5	68.0061	68.8808	69.7700	70.6740	71.5929	72.5271	73.4769	74.4424	75.4241	76.4222	77.4371	79.5181	81.6697	88.5745
10	155.2823	159.5076	163.8793	168.4032	173.0848	177.9303	182.9460	188.1384	193.5143	199.0807	204.8450	216.9981	230.0387	275.2171
15	267.2889	278.7456	290.8187	303.5448	316.9623	331.1123	346.0382	361.7864	378.4058	395.9486	414.4703	454.6896	499.5802	668.5068
20	411.0337	435.6274	462.0409	490.4209	520.9267	553.7307	589.0204	626.9990	667.8869	711.9235	759.3688	865.6380	989.2554	1497.2395
25	595.5097	642.0374	692.9940	748.8365	810.0717	877.2609	951.0264	1032.0583	1121.1219	1219.0663	1326.8334	1576.1333	1878.8466	3243.5296
30	832.2586	913.6119	1004.5150	1106.1781	1219.9710	1347.4454	1490.3594	1650.7057	1830.7435	2033.0352	2260.4879	2804.5197	3494.9641	6923.2796

Used to convert from PMT to FV on a monthly basis.

# Present Value of One Future Dollar

# FV to PV Monthly

Nominal Annual Rate of Interest (%)

Months	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	0.9959	0.9954	0.9950	0.9946	0.9942	0.9938	0.9934	0.9930	0.9926	0.9921	0.9917	0.9909	0.9901	0.9877
2	0.9917	0.9909	0.9901	0.9893	0.9884	0.9876	0.9868	0.9860	0.9852	0.9844	0.9835	0.9819	0.9803	0.9755
3	0.9876	0.9864	0.9851	0.9839	0.9827	0.9815	0.9803	0.9790	0.9778	0.9766	0.9754	0.9730	0.9706	0.9634
4	0.9835	0.9819	0.9802	0.9786	0.9770	0.9754	0.9738	0.9722	0.9706	0.9690	0.9673	0.9642	0.9610	0.9515
5	0.9794	0.9774	0.9754	0.9734	0.9713	0.9693	0.9673	0.9653	0.9633	0.9613	0.9594	0.9554	0.9515	0.9398
6	0.9754	0.9729	0.9705	0.9681	0.9657	0.9633	0.9609	0.9585	0.9562	0.9538	0.9514	0.9467	0.9420	0.9282
7	0.9713	0.9685	0.9657	0.9629	0.9601	0.9573	0.9546	0.9518	0.9490	0.9463	0.9436	0.9381	0.9327	0.9167
8	0.9673	0.9641	0.9609	0.9577	0.9545	0.9514	0.9482	0.9451	0.9420	0.9389	0.9358	0.9296	0.9235	0.9054
9	0.9633	0.9597	0.9561	0.9525	0.9490	0.9455	0.9420	0.9385	0.9350	0.9315	0.9280	0.9212	0.9143	0.8942
10	0.9593	0.9553	0.9513	0.9474	0.9435	0.9396	0.9357	0.9318	0.9280	0.9242	0.9204	0.9128	0.9053	0.8832
11	0.9553	0.9509	0.9466	0.9423	0.9380	0.9338	0.9295	0.9253	0.9211	0.9169	0.9128	0.9045	0.8963	0.8723
12	0.9513	0.9466	0.9419	0.9372	0.9326	0.9280	0.9234	0.9188	0.9142	0.9097	0.9052	0.8963	0.8874	0.8615
13	0.9474	0.9423	0.9372	0.9322	0.9272	0.9222	0.9172	0.9123	0.9074	0.9026	0.8977	0.8881	0.8787	0.8509
14	0.9434	0.9380	0.9326	0.9272	0.9218	0.9165	0.9112	0.9059	0.9007	0.8955	0.8903	0.8801	0.8700	0.8404
15	0.9395	0.9337	0.9279	0.9222	0.9165	0.9108	0.9051	0.8995	0.8940	0.8884	0.8830	0.8721	0.8613	0.8300
16	0.9356	0.9294	0.9233	0.9172	0.9111	0.9051	0.8991	0.8932	0.8873	0.8815	0.8757	0.8642	0.8528	0.8197
17	0.9318	0.9252	0.9187	0.9123	0.9059	0.8995	0.8932	0.8869	0.8807	0.8745	0.8684	0.8563	0.8444	0.8096
18	0.9279	0.9210	0.9141	0.9073	0.9006	0.8939	0.8873	0.8807	0.8742	0.8677	0.8612	0.8485	0.8360	0.7996
19	0.9240	0.9168	0.9096	0.9025	0.8954	0.8884	0.8814	0.8745	0.8676	0.8609	0.8541	0.8408	0.8277	0.7898
20	0.9202	0.9126	0.9051	0.8976	0.8902	0.8828	0.8756	0.8683	0.8612	0.8541	0.8471	0.8332	0.8195	0.7800
21	0.9164	0.9084	0.9006	0.8928	0.8850	0.8774	0.8698	0.8622	0.8548	0.8474	0.8401	0.8256	0.8114	0.7704
22	0.9126	0.9043	0.8961	0.8879	0.8799	0.8719	0.8640	0.8562	0.8484	0.8407	0.8331	0.8181	0.8034	0.7609
23	0.9088	0.9002	0.8916	0.8832	0.8748	0.8665	0.8583	0.8502	0.8421	0.8341	0.8262	0.8107	0.7954	0.7515
24	0.9050	0.8961	0.8872	0.8784	0.8697	0.8611	0.8526	0.8442	0.8358	0.8276	0.8194	0.8033	0.7876	0.7422
25	0.9013	0.8920	0.8828	0.8737	0.8647	0.8558	0.8470	0.8382	0.8296	0.8211	0.8126	0.7960	0.7798	0.7330
26	0.8975	0.8879	0.8784	0.8690	0.8597	0.8504	0.8413	0.8323	0.8234	0.8146	0.8059	0.7888	0.7720	0.7240
27	0.8938	0.8839	0.8740	0.8643	0.8547	0.8452	0.8358	0.8265	0.8173	0.8082	0.7993	0.7816	0.7644	0.7150
28	0.8901	0.8798	0.8697	0.8596	0.8497	0.8399	0.8302	0.8207	0.8112	0.8019	0.7927	0.7745	0.7568	0.7062
29	0.8864	0.8758	0.8653	0.8550	0.8448	0.8347	0.8247	0.8149	0.8052	0.7956	0.7861	0.7675	0.7493	0.6975
30	0.8827	0.8718	0.8610	0.8504	0.8399	0.8295	0.8193	0.8092	0.7992	0.7893	0.7796	0.7605	0.7419	0.6889
31	0.8791	0.8678	0.8567	0.8458	0.8350	0.8244	0.8138	0.8035	0.7932	0.7831	0.7732	0.7536	0.7346	0.6804
32	0.8754	0.8639	0.8525	0.8413	0.8302	0.8192	0.8085	0.7978	0.7873	0.7770	0.7668	0.7468	0.7273	0.6720
33	0.8718	0.8599	0.8482	0.8367	0.8254	0.8142	0.8031	0.7922	0.7815	0.7709	0.7604	0.7400	0.7201	0.6637
34	0.8682	0.8560	0.8440	0.8322	0.8206	0.8091	0.7978	0.7866	0.7757	0.7648	0.7542	0.7333	0.7130	0.6555
35	0.8646	0.8521	0.8398	0.8277	0.8158	0.8041	0.7925	0.7811	0.7699	0.7588	0.7479	0.7266	0.7059	0.6474
36	0.8610	0.8482	0.8356	0.8233	0.8111	0.7991	0.7873	0.7756	0.7641	0.7529	0.7417	0.7200	0.6989	0.6394

Years	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
4	0.8191	0.8029	0.7871	0.7716	0.7564	0.7415	0.7269	0.7126	0.6986	0.6849	0.6714	0.6453	0.6203	0.5509
5	0.7792	0.7600	0.7414	0.7232	0.7054	0.6881	0.6712	0.6547	0.6387	0.6230	0.6078	0.5784	0.5504	0.4746
10	0.6072	0.5777	0.5496	0.5230	0.4976	0.4735	0.4505	0.4287	0.4079	0.3882	0.3694	0.3345	0.3030	0.2252
15	0.4731	0.4391	0.4075	0.3782	0.3510	0.3258	0.3024	0.2807	0.2605	0.2419	0.2245	0.1935	0.1668	0.1069
20	0.3686	0.3337	0.3021	0.2735	0.2476	0.2242	0.2030	0.1838	0.1664	0.1507	0.1365	0.1119	0.0918	0.0507
25	0.2872	0.2536	0.2240	0.1978	0.1747	0.1543	0.1362	0.1203	0.1063	0.0939	0.0829	0.0647	0.0505	0.0241
30	0.2238	0.1928	0.1660	0.1430	0.1232	0.1061	0.0914	0.0788	0.0679	0.0585	0.0504	0.0374	0.0278	0.0114

Used to convert from FV to PV on a monthly basis. Not often used.



# Monthly Value of One Future Dollar

# FV to PMT Monthly

Nominal Annual Rate of Interest (%)

Months	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.4990	0.4989	0.4988	0.4986	0.4985	0.4984	0.4983	0.4982	0.4981	0.4980	0.4979	0.4977	0.4975	0.4969
3	0.3319	0.3318	0.3317	0.3315	0.3314	0.3313	0.3311	0.3310	0.3308	0.3307	0.3306	0.3303	0.3300	0.3292
4	0.2484	0.2483	0.2481	0.2480	0.2478	0.2477	0.2475	0.2474	0.2472	0.2471	0.2469	0.2466	0.2463	0.2454
5	0.1983	0.1982	0.1980	0.1978	0.1977	0.1975	0.1974	0.1972	0.1970	0.1969	0.1967	0.1964	0.1960	0.1951
6	0.1649	0.1648	0.1646	0.1644	0.1643	0.1641	0.1639	0.1637	0.1636	0.1634	0.1632	0.1629	0.1625	0.1615
7	0.1411	0.1409	0.1407	0.1406	0.1404	0.1402	0.1400	0.1398	0.1397	0.1395	0.1393	0.1390	0.1386	0.1376
8	0.1232	0.1230	0.1228	0.1226	0.1225	0.1223	0.1221	0.1219	0.1218	0.1216	0.1214	0.1210	0.1207	0.1196
9	0.1093	0.1091	0.1089	0.1087	0.1085	0.1084	0.1082	0.1080	0.1078	0.1076	0.1075	0.1071	0.1067	0.1057
10	0.0981	0.0980	0.0978	0.0976	0.0974	0.0972	0.0970	0.0969	0.0967	0.0965	0.0963	0.0959	0.0956	0.0945
11	0.0890	0.0888	0.0887	0.0885	0.0883	0.0881	0.0879	0.0877	0.0876	0.0874	0.0872	0.0868	0.0865	0.0854
12	0.0814	0.0813	0.0811	0.0809	0.0807	0.0805	0.0803	0.0801	0.0800	0.0798	0.0796	0.0792	0.0788	0.0778
13	0.0750	0.0748	0.0746	0.0745	0.0743	0.0741	0.0739	0.0737	0.0735	0.0733	0.0732	0.0728	0.0724	0.0713
14	0.0695	0.0693	0.0691	0.0689	0.0688	0.0686	0.0684	0.0682	0.0680	0.0678	0.0676	0.0673	0.0669	0.0658
15	0.0647	0.0646	0.0644	0.0642	0.0640	0.0638	0.0636	0.0634	0.0632	0.0630	0.0629	0.0625	0.0621	0.0610
16	0.0606	0.0604	0.0602	0.0600	0.0598	0.0596	0.0594	0.0592	0.0591	0.0589	0.0587	0.0583	0.0579	0.0568
17	0.0569	0.0567	0.0565	0.0563	0.0561	0.0559	0.0557	0.0556	0.0554	0.0552	0.0550	0.0546	0.0543	0.0532
18	0.0536	0.0534	0.0532	0.0530	0.0529	0.0527	0.0525	0.0523	0.0521	0.0519	0.0517	0.0514	0.0510	0.0499
19	0.0507	0.0505	0.0503	0.0501	0.0499	0.0497	0.0495	0.0494	0.0492	0.0490	0.0488	0.0484	0.0481	0.0470
20	0.0480	0.0479	0.0477	0.0475	0.0473	0.0471	0.0469	0.0467	0.0465	0.0463	0.0462	0.0458	0.0454	0.0443
21	0.0457	0.0455	0.0453	0.0451	0.0449	0.0447	0.0445	0.0443	0.0441	0.0440	0.0438	0.0434	0.0430	0.0419
22	0.0435	0.0433	0.0431	0.0429	0.0427	0.0425	0.0424	0.0422	0.0420	0.0418	0.0416	0.0412	0.0409	0.0398
23	0.0415	0.0413	0.0411	0.0409	0.0408	0.0406	0.0404	0.0402	0.0400	0.0398	0.0396	0.0393	0.0389	0.0378
24	0.0397	0.0395	0.0393	0.0391	0.0389	0.0387	0.0386	0.0384	0.0382	0.0380	0.0378	0.0374	0.0371	0.0360
25	0.0380	0.0378	0.0377	0.0375	0.0373	0.0371	0.0369	0.0367	0.0365	0.0363	0.0361	0.0358	0.0354	0.0343
26	0.0365	0.0363	0.0361	0.0359	0.0357	0.0355	0.0354	0.0352	0.0350	0.0348	0.0346	0.0342	0.0339	0.0328
27	0.0351	0.0349	0.0347	0.0345	0.0343	0.0341	0.0339	0.0337	0.0336	0.0334	0.0332	0.0328	0.0324	0.0314
28	0.0337	0.0336	0.0334	0.0332	0.0330	0.0328	0.0326	0.0324	0.0322	0.0320	0.0319	0.0315	0.0311	0.0300
29	0.0325	0.0323	0.0321	0.0319	0.0317	0.0316	0.0314	0.0312	0.0310	0.0308	0.0306	0.0303	0.0299	0.0288
30	0.0314	0.0312	0.0310	0.0308	0.0306	0.0304	0.0302	0.0300	0.0298	0.0297	0.0295	0.0291	0.0287	0.0277
31	0.0303	0.0301	0.0299	0.0297	0.0295	0.0293	0.0291	0.0290	0.0288	0.0286	0.0284	0.0280	0.0277	0.0266
32	0.0293	0.0291	0.0289	0.0287	0.0285	0.0283	0.0281	0.0280	0.0278	0.0276	0.0274	0.0270	0.0267	0.0256
33	0.0283	0.0281	0.0279	0.0278	0.0276	0.0274	0.0272	0.0270	0.0268	0.0266	0.0265	0.0261	0.0257	0.0247
34	0.0274	0.0272	0.0271	0.0269	0.0267	0.0265	0.0263	0.0261	0.0259	0.0257	0.0256	0.0252	0.0248	0.0238
35	0.0266	0.0264	0.0262	0.0260	0.0258	0.0256	0.0255	0.0253	0.0251	0.0249	0.0247	0.0244	0.0240	0.0230
36	0.0258	0.0256	0.0254	0.0252	0.0250	0.0249	0.0247	0.0245	0.0243	0.0241	0.0239	0.0236	0.0232	0.0222

Years	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%	11.0%	12.0%	15.0%
4	0.0189	0.0187	0.0185	0.0183	0.0181	0.0179	0.0177	0.0176	0.0174	0.0172	0.0170	0.0167	0.0163	0.0153
5	0.0147	0.0145	0.0143	0.0141	0.0140	0.0138	0.0136	0.0134	0.0133	0.0131	0.0129	0.0126	0.0122	0.0113
10	0.0064	0.0063	0.0061	0.0059	0.0058	0.0056	0.0055	0.0053	0.0052	0.0050	0.0049	0.0046	0.0043	0.0036
15	0.0037	0.0036	0.0034	0.0033	0.0032	0.0030	0.0029	0.0028	0.0026	0.0025	0.0024	0.0022	0.0020	0.0015
20	0.0024	0.0023	0.0022	0.0020	0.0019	0.0018	0.0017	0.0016	0.0015	0.0014	0.0013	0.0012	0.0010	0.0007
25	0.0017	0.0016	0.0014	0.0013	0.0012	0.0011	0.0011	0.0010	0.0009	0.0008	0.0008	0.0006	0.0005	0.0003
30	0.0012	0.0011	0.0010	0.0009	0.0008	0.0007	0.0007	0.0006	0.0005	0.0005	0.0004	0.0004	0.0003	0.0001

Used to convert from FV to PMT on an monthly basis.