

TABLE 12-1 Future Value (Amount) of an Ordinary Annuity of

Periods	$\frac{1}{2}\%$	1%	$1\frac{1}{2}\%$	2%	3%	4%	5%	6%	7%	8%	Periods
1	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1
2	2.00500	2.01000	2.01500	2.02000	2.03000	2.04000	2.05000	2.06000	2.07000	2.08000	2
3	3.01502	3.03010	3.04522	3.06040	3.09090	3.12160	3.15250	3.18360	3.21490	3.24640	3
4	4.03010	4.06040	4.09090	4.12161	4.18363	4.24646	4.31013	4.37462	4.43994	4.50611	4
5	5.05025	5.10101	5.15227	5.20404	5.30914	5.41632	5.52563	5.63709	5.75074	5.86660	5
6	6.07550	6.15202	6.22955	6.30812	6.46841	6.63298	6.80191	6.97532	7.15329	7.33593	6
7	7.10588	7.21354	7.32299	7.43428	7.66246	7.89829	8.14201	8.39384	8.65402	8.92280	7
8	8.14141	8.28567	8.43284	8.58297	8.89234	9.21423	9.54911	9.89747	10.25980	10.63663	8
9	9.18212	9.36853	9.55933	9.75463	10.15911	10.58280	11.02656	11.49132	11.97799	12.48756	9
10	10.22803	10.46221	10.70272	10.94972	11.46388	12.00611	12.57789	13.18079	13.81645	14.48656	10
11	11.27917	11.56683	11.86326	12.16872	12.80780	13.48635	14.20679	14.97164	15.78360	16.64549	11
12	12.33556	12.68250	13.04121	13.41209	14.19203	15.02581	15.91713	16.86994	17.88845	18.97713	12
13	13.39724	13.80933	14.23683	14.68033	15.61779	16.62684	17.71298	18.88214	20.14064	21.49530	13
14	14.46423	14.94742	15.45038	15.97394	17.08632	18.29191	19.59863	21.01507	22.55049	24.21492	14
15	15.53655	16.09690	16.68214	17.29342	18.59891	20.02359	21.57856	23.27597	25.12902	27.15211	15
16	16.61423	17.25786	17.93237	18.63929	20.15688	21.82453	23.65749	25.67253	27.88805	30.32428	16
17	17.69730	18.43044	19.20136	20.01207	21.76159	23.69751	25.84037	28.21288	30.84022	33.75023	17
18	18.78579	19.61475	20.48938	21.41231	23.41444	25.64541	28.13238	30.90565	33.99903	37.45024	18
19	19.87972	20.81090	21.79672	22.84056	25.11687	27.67123	30.53900	33.75999	37.37896	41.44626	19
20	20.97912	22.01900	23.12367	24.29737	26.87037	29.77808	33.06595	36.78559	40.99549	45.76196	20
21	22.08401	23.23919	24.47052	25.78332	28.67649	31.96920	35.71925	39.99273	44.86518	50.42292	21
22	23.19443	24.47159	25.83758	27.29898	30.53678	34.24797	38.50521	43.39229	49.00574	55.45676	22
23	24.31040	25.71630	27.22514	28.84496	32.45288	36.61789	41.43048	46.99583	53.43614	60.89330	23
24	25.43196	26.97346	28.63352	30.42186	34.42647	39.08260	44.50200	50.81558	58.17667	66.76476	24
25	26.55912	28.24320	30.06302	32.03030	36.45926	41.64591	47.72710	54.86451	63.24904	73.10594	25
26	27.69191	29.52563	31.51397	33.67091	38.55304	44.31174	51.11345	59.15638	68.67647	79.95442	26
27	28.83037	30.82089	32.98668	35.34432	40.70963	47.08421	54.66913	63.70577	74.48382	87.35077	27
28	29.97452	32.12910	34.48148	37.05121	42.93092	49.96758	58.40258	68.52811	80.69769	95.33883	28
29	31.12439	33.45039	35.99870	38.79223	45.21885	52.96629	62.32271	73.63980	87.34653	103.96594	29
30	32.28002	34.78489	37.53868	40.56808	47.57542	56.08494	66.43885	79.05819	94.46079	113.28321	30
31	33.44142	36.13274	39.10176	42.37944	50.00268	59.32834	70.76079	84.80168	102.07304	123.34587	31
32	34.60862	37.49407	40.68829	44.22703	52.50276	62.70147	75.29883	90.88978	110.21815	134.21354	32
33	35.78167	38.86901	42.29861	46.11157	55.07784	66.20953	80.06377	97.34316	118.93343	145.95062	33
34	36.96058	40.25770	43.93309	48.03380	57.73018	69.85791	85.06696	104.18375	128.25876	158.62667	34
35	38.14538	41.66028	45.59209	49.99448	60.46208	73.65222	90.32031	111.43478	138.23688	172.31680	35
36	39.33610	43.07688	47.27597	51.99437	63.27594	77.59831	95.83632	119.12087	148.91346	187.10215	36

The values in Table 12-1 were generated by the formula $\frac{(1+i)^n - 1}{i}$ and rounded to five decimal places, where i is the interest rate per period and n is the total number of periods.

TABLE 12-1 Future Value (Amount) of an Ordinary Annuity of \$1 (Continued)

Periods	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	Periods
1	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1
2	2.09000	2.10000	2.11000	2.12000	2.13000	2.14000	2.15000	2.16000	2.17000	2.18000	2
3	3.27810	3.31000	3.34210	3.37440	3.40690	3.43960	3.47250	3.50560	3.53890	3.57240	3
4	4.57313	4.64100	4.70973	4.77933	4.84980	4.92114	4.99338	5.06650	5.14051	5.21543	4
5	5.98471	6.10510	6.22780	6.35285	6.48027	6.61010	6.74238	6.87714	7.01440	7.15421	5
6	7.52333	7.71561	7.91286	8.11519	8.32271	8.53552	8.75374	8.97748	9.20685	9.44197	6
7	9.20043	9.48717	9.78327	10.08901	10.40466	10.73049	11.06680	11.41387	11.77201	12.14152	7
8	11.02847	11.43589	11.85943	12.29969	12.75726	13.23276	13.72682	14.24009	14.77325	15.32700	8
9	13.02104	13.57948	14.16397	14.77566	15.41571	16.08535	16.78584	17.51851	18.28471	19.08585	9
10	15.19293	15.93742	16.72201	17.54874	18.41975	19.33730	20.30372	21.32147	22.39311	23.52131	10
11	17.56029	18.53117	19.56143	20.65458	21.81432	23.04452	24.34928	25.73290	27.19994	28.75514	11
12	20.14072	21.38428	22.71319	24.13313	25.65018	27.27075	29.00167	30.85017	32.82393	34.93107	12
13	22.95338	24.52271	26.21164	28.02911	29.98470	32.08865	34.35192	36.78620	39.40399	42.21866	13
14	26.01919	27.97498	30.09492	32.39260	34.88271	37.58107	40.50471	43.67199	47.10267	50.81802	14
15	29.36092	31.77248	34.40536	37.27971	40.41746	43.84241	47.58041	51.65951	56.11013	60.96527	15
16	33.00340	35.94973	39.18995	42.75328	46.67173	50.98035	55.71747	60.92503	66.64885	72.93901	16
17	36.97370	40.54470	44.50084	48.88367	53.73906	59.11760	65.07509	71.67303	78.97915	87.06804	17
18	41.30134	45.59917	50.39594	55.74971	61.72514	68.39407	75.83636	84.14072	93.40561	103.74028	18
19	46.01846	51.15909	56.93949	63.43968	70.74941	78.96923	88.21181	98.60323	110.28456	123.41353	19
20	51.16012	57.27500	64.20283	72.05244	80.94683	91.02493	102.44358	115.37975	130.03294	146.62797	20
21	56.76453	64.00250	72.26514	81.69874	92.46992	104.76842	118.81012	134.84051	153.13854	174.02100	21
22	62.87334	71.40275	81.21431	92.50258	105.49101	120.43600	137.63164	157.41499	180.17209	206.34479	22
23	69.53194	79.54302	91.14788	104.60289	120.20484	138.29704	159.27638	183.60138	211.80134	244.48685	23
24	76.78981	88.49733	102.17415	118.15524	136.83147	158.65862	184.16784	213.97761	248.80757	289.49448	24
25	84.70090	98.34706	114.41331	133.33387	155.61956	181.87083	212.79302	249.21402	292.10486	342.60349	25
26	93.32398	109.18177	127.99877	150.33393	176.85010	208.33274	245.71197	290.08827	342.76268	405.27211	26
27	102.72313	121.09994	143.07864	169.37401	200.84061	238.49933	283.56877	337.50239	402.03234	479.22109	27
28	112.96822	134.20994	159.81729	190.69889	227.94989	272.88923	327.10408	392.50277	471.37783	566.48089	28
29	124.13536	148.63093	178.39719	214.58275	258.58338	312.09373	377.16969	456.30322	552.51207	669.44745	29
30	136.30754	164.49402	199.02088	241.33268	293.19922	356.78685	434.74515	530.31173	647.43912	790.94799	30
31	149.57522	181.94342	221.91317	271.29261	332.31511	407.73701	500.95692	616.16161	758.50377	934.31863	31
32	164.03699	201.13777	247.32362	304.84772	376.51608	465.82019	577.10046	715.74746	888.44941	1103.49598	32
33	179.80032	222.25154	275.52922	342.42945	426.46317	532.03501	664.66552	831.26706	1040.48581	1303.12526	33
34	196.98234	245.47670	306.83744	384.52098	482.90338	607.51991	765.36535	965.26979	1218.36839	1538.68781	34
35	215.71075	271.02437	341.58955	431.66350	546.68082	693.57270	881.17016	1120.71295	1426.49102	1816.65161	35
36	236.12472	299.12681	380.16441	484.46312	618.74933	791.67288	1014.34568	1301.02703	1669.99450	2144.64890	36

The values in Table 12-1 were generated by the formula $\frac{(1+i)^n - 1}{i}$ and rounded to five decimal places, where i is the interest rate per period and n is the total number of periods.