

**Table A.** Future Value of \$1 Lump Sum (or the Value of \$1 Saved Each Year) Compounded at Various Interest Rates for Various Periods

Year	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358
10	1.105	1.219	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797
15	1.161	1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177
16	1.173	1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727
21	1.232	1.516	1.860	2.279	2.786	3.400	4.141	5.034	6.109	7.400
22	1.245	1.546	1.916	2.370	2.925	3.604	4.430	5.437	6.659	8.140
23	1.257	1.577	1.974	2.465	3.072	3.820	4.741	5.871	7.258	8.954
24	1.270	1.608	2.033	2.563	3.225	4.049	5.072	6.341	7.911	9.850
25	1.282	1.641	2.094	2.666	3.386	4.292	5.427	6.848	8.623	10.835
26	1.295	1.673	2.157	2.772	3.556	4.549	5.807	7.396	9.399	11.918
27	1.308	1.707	2.221	2.883	3.733	4.822	6.214	7.988	10.245	13.110
28	1.321	1.741	2.288	2.999	3.920	5.112	6.649	8.627	11.167	14.421
29	1.335	1.776	2.357	3.119	4.116	5.418	7.114	9.317	12.172	15.863
30	1.348	1.811	2.427	3.243	4.322	5.743	7.612	10.063	13.268	17.449

Year	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.110	1.120	1.130	1.140	1.150	1.160	1.170	1.180	1.190	01.20
2	1.232	1.254	1.277	1.300	1.323	1.346	1.369	1.392	1.416	01.44
3	1.368	1.405	1.443	1.482	1.521	1.561	1.602	1.643	1.685	01.73
4	1.518	1.574	1.630	1.689	1.749	1.811	1.874	1.939	2.005	02.07
5	1.685	1.762	1.842	1.925	2.011	2.100	2.192	2.288	2.386	02.49
6	1.870	1.974	2.082	2.195	2.313	2.436	2.565	2.700	2.840	02.99
7	2.076	2.211	2.353	2.502	2.660	2.826	3.001	3.185	3.379	03.58
8	2.305	2.476	2.658	2.853	3.059	3.278	3.511	3.759	4.021	04.30
9	2.558	2.773	3.004	3.252	3.518	3.803	4.108	4.435	4.785	05.16
10	2.839	3.106	3.395	3.707	4.046	4.411	4.807	5.234	5.695	06.19
11	3.152	3.479	3.836	4.226	4.652	5.117	5.624	6.176	6.777	07.43
12	3.498	3.896	4.335	4.818	5.350	5.936	6.580	7.288	8.064	08.92
13	3.883	4.363	4.898	5.492	6.153	6.886	7.699	8.599	9.596	10.70
14	4.310	4.887	5.535	6.261	7.076	7.988	9.007	10.147	11.420	12.84
15	4.785	5.474	6.254	7.138	8.137	9.266	10.539	11.974	13.590	15.41
16	5.311	6.130	7.067	8.137	9.358	10.748	12.330	14.129	16.172	18.49
17	5.895	6.866	7.986	9.276	10.761	12.468	14.426	16.672	19.244	22.19
18	6.544	7.690	9.024	10.575	12.375	14.463	16.879	19.673	22.901	26.62
19	7.263	8.613	10.197	12.056	14.232	16.777	19.748	23.214	27.252	31.95
20	8.062	9.646	11.523	13.743	16.367	19.461	23.106	27.393	32.429	38.34
21	8.949	10.804	13.021	15.668	18.822	22.574	27.034	32.324	38.591	46.01
22	9.934	12.100	14.714	17.861	21.645	26.186	31.629	38.142	45.923	55.21
23	11.026	13.552	16.627	20.362	24.891	30.376	37.006	45.008	54.649	66.25
24	12.239	15.179	18.788	23.212	28.625	35.236	43.297	53.109	65.032	79.50
25	13.585	17.000	21.231	26.462	32.919	40.874	50.658	62.669	77.388	95.40
26	15.080	19.040	23.991	30.167	37.857	47.414	59.270	73.949	92.092	114.48
27	16.739	21.325	27.109	34.390	43.535	55.000	69.345	87.260	109.589	137.37
28	18.580	23.884	30.633	39.204	50.066	63.800	81.134	102.967	130.411	164.84
29	20.624	26.750	34.616	44.693	57.575	74.009	94.927	121.501	155.189	197.81
30	22.892	29.960	39.116	50.950	66.212	85.850	111.065	143.371	184.675	237.38

**Table B.** Future Value of \$1 Annuity (or the Value of \$1 Saved Each Year + \$1 Added Each Year) Compounded at Various Interest Rates for Various Periods

Year	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	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
3	3.030	3.060	3.091	3.122	3.153	3.184	3.215	3.246	3.278	3.310
4	4.060	4.122	4.184	4.246	4.310	4.375	4.440	4.506	4.573	4.640
5	5.101	5.204	5.309	5.416	5.526	5.637	5.751	5.867	5.985	6.100
6	6.152	6.308	6.468	6.633	6.802	6.975	7.153	7.336	7.523	7.710
7	7.214	7.434	7.662	7.898	8.142	8.394	8.654	8.923	9.200	9.480
8	8.286	8.583	8.892	9.214	9.549	9.897	10.260	10.637	11.028	11.430
9	9.369	9.755	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.570
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.930
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.530
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.380
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.520
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.970
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.770
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.540
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.590
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.150
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.270
21	23.239	25.783	28.676	31.969	35.719	39.993	44.865	50.423	56.765	64.000
22	24.472	27.299	30.537	34.248	38.505	43.392	49.006	55.457	62.873	71.400
23	25.716	28.845	32.453	36.618	41.430	46.996	53.436	60.893	69.532	79.540
24	26.973	30.422	34.426	39.083	44.502	50.816	58.177	66.765	76.790	88.490
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.340
26	29.526	33.671	38.553	44.312	51.113	59.156	68.676	79.954	93.324	109.18
27	30.821	35.344	40.710	47.084	54.669	63.706	74.484	87.351	102.723	121.10
28	32.129	37.051	42.931	49.968	58.403	68.528	80.698	95.339	112.968	134.21
29	33.450	38.792	45.219	52.966	62.323	73.640	87.347	103.966	124.135	148.63
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.283	136.308	164.49

<b>Year</b>	<b>11%</b>	<b>12%</b>	<b>13%</b>	<b>14%</b>	<b>15%</b>	<b>16%</b>	<b>17%</b>	<b>18%</b>	<b>19%</b>	<b>20%</b>
<b>1</b>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>2</b>	2.110	2.120	2.130	2.140	2.150	2.160	2.170	2.180	2.190	2.200
<b>3</b>	3.342	3.374	3.407	3.440	3.473	3.506	3.539	3.572	3.606	3.640
<b>4</b>	4.710	4.779	4.850	4.921	4.993	5.066	5.141	5.215	5.291	5.368
<b>5</b>	6.228	6.353	6.480	6.610	6.742	6.877	7.014	7.154	7.297	7.442
<b>6</b>	7.913	8.115	8.323	8.536	8.754	8.977	9.207	9.442	9.683	9.930
<b>7</b>	9.783	10.089	10.405	10.730	11.067	11.414	11.772	12.142	12.523	12.916
<b>8</b>	11.859	12.300	12.757	13.233	13.727	14.240	14.773	15.327	15.902	16.499
<b>9</b>	14.164	14.776	15.416	16.085	16.786	17.519	18.285	19.086	19.923	20.799
<b>10</b>	16.722	17.549	18.420	19.337	20.304	21.321	22.393	23.521	24.709	25.959
<b>11</b>	19.561	20.655	21.814	23.045	24.349	25.733	27.200	28.755	30.404	32.150
<b>12</b>	22.713	24.133	25.650	27.271	29.002	30.850	32.824	34.931	37.180	39.581
<b>13</b>	26.212	28.029	29.985	32.089	34.352	36.786	39.404	42.219	45.244	48.497
<b>14</b>	30.095	32.393	34.883	37.581	40.505	43.672	47.103	50.818	54.841	59.196
<b>15</b>	34.405	37.280	40.417	43.842	47.580	51.660	56.110	60.965	66.261	72.035
<b>16</b>	39.190	42.753	46.672	50.980	55.717	60.925	66.649	72.939	79.850	87.442
<b>17</b>	44.501	48.884	53.739	59.118	65.075	71.673	78.979	87.068	96.022	105.931
<b>18</b>	50.396	55.750	61.725	68.394	75.836	84.141	93.406	103.740	115.266	128.117
<b>19</b>	56.939	63.440	70.749	78.969	88.212	98.603	110.285	123.414	138.166	154.740
<b>20</b>	64.203	72.052	80.947	91.025	102.444	115.380	130.033	146.628	165.418	186.688
<b>21</b>	72.265	81.699	92.470	104.768	118.810	134.841	153.139	174.021	197.847	225.026
<b>22</b>	81.214	92.503	105.491	120.436	137.632	157.415	180.172	206.345	236.438	271.031
<b>23</b>	91.148	104.603	120.205	138.297	159.276	183.601	211.801	244.487	282.362	326.237
<b>24</b>	102.174	118.155	136.831	158.659	184.168	213.978	248.808	289.494	337.010	392.484
<b>25</b>	114.413	133.334	155.620	181.871	212.793	249.214	292.105	342.603	402.042	471.981
<b>26</b>	127.999	150.334	176.850	208.333	245.712	290.088	342.763	405.272	479.431	567.377
<b>27</b>	143.079	169.374	200.841	238.499	283.569	337.502	402.032	479.221	571.522	681.853
<b>28</b>	159.817	190.699	227.950	272.889	327.104	392.503	471.378	566.481	681.112	819.223
<b>29</b>	178.397	214.583	258.583	312.094	377.170	456.303	552.512	669.447	811.523	984.068
<b>30</b>	199.021	241.333	293.199	356.787	434.745	530.312	647.439	790.948	966.712	1181.882