

r 8%p.a.

108

number	annuity	interest	amortizatic	debt
0				150000
1	1952.807	1000	952.8072	149047.2
2	1952.807	993.648	959.1593	148088
3	1952.807	987.2536	965.5537	147122.5
4	1952.807	980.8165	971.9907	146150.5
5	1952.807	974.3366	978.4706	145172
6	1952.807	967.8135	984.9938	144187
7	1952.807	961.2468	991.5604	143195.5
8	1952.807	954.6364	998.1708	142197.3
9	1952.807	947.982	1004.825	141192.5
10	1952.807	941.2831	1011.524	140180.9
11	1952.807	934.5396	1018.268	139162.7
12	1952.807	927.7512	1025.056	138137.6
13	1952.807	920.9175	1031.89	137105.7
14	1952.807	914.0382	1038.769	136067
15	1952.807	907.1131	1045.694	135021.3
16	1952.807	900.1418	1052.665	133968.6
17	1952.807	893.124	1059.683	132908.9
18	1952.807	886.0595	1066.748	131842.2
19	1952.807	878.9478	1073.859	130768.3
20	1952.807	871.7887	1081.018	129687.3
21	1952.807	864.582	1088.225	128599.1
22	1952.807	857.3271	1095.48	127503.6
23	1952.807	850.0239	1102.783	126400.8
24	1952.807	842.672	1110.135	125290.7
25	1952.807	835.2711	1117.536	124173.1
26	1952.807	827.8209	1124.986	123048.1
27	1952.807	820.321	1132.486	121915.7
28	1952.807	812.7711	1140.036	120775.6
29	1952.807	805.1708	1147.636	119628
30	1952.807	797.5199	1155.287	118472.7
31	1952.807	789.818	1162.989	117309.7
32	1952.807	782.0647	1170.742	116139
33	1952.807	774.2598	1178.547	114960.4
34	1952.807	766.4028	1186.404	113774
35	1952.807	758.4934	1194.314	112579.7
36	1952.807	750.5314	1202.276	111377.4
37	1952.807	742.5162	1210.291	110167.1
38	1952.807	734.4476	1218.36	108948.8
39	1952.807	726.3252	1226.482	107722.3
40	1952.807	718.1486	1234.659	106487.6
41	1952.807	709.9176	1242.89	105244.7
42	1952.807	701.6316	1251.176	103993.6
43	1952.807	693.2905	1259.517	102734.1
44	1952.807	684.8937	1267.914	101466.1

45	1952.807	676.4409	1276.366	100189.8
46	1952.807	667.9318	1284.875	98904.9
47	1952.807	659.366	1293.441	97611.46
48	1952.807	650.7431	1302.064	96309.39
49	1952.807	642.0626	1310.745	94998.65
50	1952.807	633.3243	1319.483	93679.17
51	1952.807	624.5278	1328.279	92350.89
52	1952.807	615.6726	1337.135	91013.75
53	1952.807	606.7583	1346.049	89667.7
54	1952.807	597.7847	1355.023	88312.68
55	1952.807	588.7512	1364.056	86948.62
56	1952.807	579.6575	1373.15	85575.47
57	1952.807	570.5032	1382.304	84193.17
58	1952.807	561.2878	1391.519	82801.65
59	1952.807	552.011	1400.796	81400.85
60	1952.807	542.6724	1410.135	79990.72
61	1952.807	533.2715	1419.536	78571.18
62	1952.807	523.8079	1428.999	77142.18
63	1952.807	514.2812	1438.526	75703.66
64	1952.807	504.6911	1448.116	74255.54
65	1952.807	495.037	1457.77	72797.77
66	1952.807	485.3185	1467.489	71330.28
67	1952.807	475.5352	1477.272	69853.01
68	1952.807	465.6867	1487.12	68365.89
69	1952.807	455.7726	1497.035	66868.86
70	1952.807	445.7924	1507.015	65361.84
71	1952.807	435.7456	1517.062	63844.78
72	1952.807	425.6319	1527.175	62317.6
73	1952.807	415.4507	1537.357	60780.25
74	1952.807	405.2017	1547.606	59232.64
75	1952.807	394.8843	1557.923	57674.72
76	1952.807	384.4981	1568.309	56106.41
77	1952.807	374.0427	1578.764	54527.65
78	1952.807	363.5176	1589.29	52938.36
79	1952.807	352.9224	1599.885	51338.47
80	1952.807	342.2565	1610.551	49727.92
81	1952.807	331.5195	1621.288	48106.63
82	1952.807	320.7109	1632.096	46474.54
83	1952.807	309.8302	1642.977	44831.56
84	1952.807	298.8771	1653.93	43177.63
85	1952.807	287.8509	1664.956	41512.67
86	1952.807	276.7512	1676.056	39836.62
87	1952.807	265.5774	1687.23	38149.39
88	1952.807	254.3292	1698.478	36450.91
89	1952.807	243.0061	1709.801	34741.11
90	1952.807	231.6074	1721.2	33019.91
91	1952.807	220.1327	1732.675	31287.23
92	1952.807	208.5816	1744.226	29543.01
93	1952.807	196.9534	1755.854	27787.15
94	1952.807	185.2477	1767.56	26019.59

95	1952.807	173.464	1779.343	24240.25
96	1952.807	161.6017	1791.206	22449.05
97	1952.807	149.6603	1803.147	20645.9
98	1952.807	137.6393	1815.168	18830.73
99	1952.807	125.5382	1827.269	17003.46
100	1952.807	113.3564	1839.451	15164.01
101	1952.807	101.0934	1851.714	13312.3
102	1952.807	88.74865	1864.059	11448.24
103	1952.807	76.32159	1876.486	9571.753
104	1952.807	63.81169	1888.996	7682.758
105	1952.807	51.21838	1901.589	5781.169
106	1952.807	38.54112	1914.266	3866.903
107	1952.807	25.77935	1927.028	1939.875
108	1952.807	12.9325	1939.875	0.00

60903.18

q 0.980264

36

number annuity interest

0

		sum_excel	1	5897.565	3020.044
1.006667	1.006667	89219.75	2	5897.565	2962.11
			3	5897.565	2903.008
	GS	89219.75	4	5897.565	2842.717
73			5	5897.565	2781.212
			6	5897.565	2718.468
M73	D73	60780.25	7	5897.565	2654.461
		60780.25	8	5897.565	2589.166
			9	5897.565	2522.556
	sum_l	53335.18	10	5897.565	2454.605
			11	5897.565	2385.285
	excel	53335.18	12	5897.565	2314.571
			13	5897.565	2242.432
			14	5897.565	2168.841
			15	5897.565	2093.768
			16	5897.565	2017.184
			17	5897.565	1939.058
			18	5897.565	1859.359
			19	5897.565	1778.055
			20	5897.565	1695.114
			21	5897.565	1610.504
			22	5897.565	1524.189
			23	5897.565	1436.138
			24	5897.565	1346.313
			25	5897.565	1254.68
			26	5897.565	1161.201
			27	5897.565	1065.841
			28	5897.565	968.5611
			29	5897.565	869.3224
			30	5897.565	768.0856
			31	5897.565	664.8106
			32	5897.565	559.4563
			33	5897.565	451.9808
			34	5897.565	342.3414
			35	5897.565	230.4946
			36	5897.565	116.3959
					62312.33
					62312.33

D72	D0-sum	
I73		
415.4507	1537.357	1537.357



2960.44  
5897.565

108

amortizatic debt

number

150000	1.020134			0
2877.52 147122.5	1.020134			1
2935.455 144187	1.020134			2
2994.556 141192.5	1.020134			3
3054.848 138137.6	1.020134			4
3116.353 135021.3	1.020134			5
3179.096 131842.2				6
3243.103 128599.1				7
3308.399 125290.7	30 M30	5129.479		8
3375.009 121915.7		5129.479		9
3442.96 118472.7	I30	768.0856		10
3512.279 114960.4		768.0856		11
3582.994 111377.4				12
3655.133 107722.3	D30	T6-sumM30	33019.91	13
3728.724 103993.6		116980.1		14
3803.797 100189.8		116980.1	33019.91	15
3880.381 96309.39				16
3958.507 92350.89				17
4038.206 88312.68				18
4119.51 84193.17				19
4202.451 79990.72				20
4287.061 75703.66				21
4373.375 71330.28				22
4461.427 66868.86				23
4551.252 62317.6				24
4642.885 57674.72				25
4736.363 52938.36				26
4831.723 48106.63				27
4929.004 43177.63				28
5028.242 38149.39				29
5129.479 33019.91				30
5232.754 27787.15				31
5338.108 22449.05				32
5445.584 17003.46				33
5555.223 11448.24				34
5667.07 5781.169				35
5781.169 0.00				36
				37
				38
				39
				40
				41
				42
				43
				44

45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94



95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108

annuity interest amortizatic debt

150000

2388.889	1000	1388.889	148611.1	-9.25926	-9.25926
2379.63	990.7407	1388.889	147222.2	-9.25926	-9.25926
2370.37	981.4815	1388.889	145833.3	-9.25926	-9.25926
2361.111	972.2222	1388.889	144444.4	-9.25926	-9.25926
2351.852	962.963	1388.889	143055.6	-9.25926	-9.25926
2342.593	953.7037	1388.889	141666.7	-9.25926	-9.25926
2333.333	944.4444	1388.889	140277.8	-9.25926	-9.25926
2324.074	935.1852	1388.889	138888.9	-9.25926	-9.25926
2314.815	925.9259	1388.889	137500	-9.25926	-9.25926
2305.556	916.6667	1388.889	136111.1	-9.25926	-9.25926
2296.296	907.4074	1388.889	134722.2	-9.25926	-9.25926
2287.037	898.1481	1388.889	133333.3		
2277.778	888.8889	1388.889	131944.4		
2268.519	879.6296	1388.889	130555.6		
2259.259	870.3704	1388.889	129166.7		
2250	861.1111	1388.889	127777.8		
2240.741	851.8519	1388.889	126388.9		
2231.481	842.5926	1388.889	125000		
2222.222	833.3333	1388.889	123611.1		
2212.963	824.0741	1388.889	122222.2		
2203.704	814.8148	1388.889	120833.3		
2194.444	805.5556	1388.889	119444.4		
2185.185	796.2963	1388.889	118055.6		
2175.926	787.037	1388.889	116666.7		
2166.667	777.7778	1388.889	115277.8		
2157.407	768.5185	1388.889	113888.9		
2148.148	759.2593	1388.889	112500		
2138.889	750	1388.889	111111.1		
2129.63	740.7407	1388.889	109722.2		
2120.37	731.4815	1388.889	108333.3		
2111.111	722.2222	1388.889	106944.4		
2101.852	712.963	1388.889	105555.6		
2092.593	703.7037	1388.889	104166.7		
2083.333	694.4444	1388.889	102777.8		
2074.074	685.1852	1388.889	101388.9		
2064.815	675.9259	1388.889	100000		
2055.556	666.6667	1388.889	98611.11		
2046.296	657.4074	1388.889	97222.22		
2037.037	648.1481	1388.889	95833.33		
2027.778	638.8889	1388.889	94444.44		
2018.519	629.6296	1388.889	93055.56		
2009.259	620.3704	1388.889	91666.67		
2000	611.1111	1388.889	90277.78		
1990.741	601.8519	1388.889	88888.89		

a l m  
24th row 2175.926 787.037

1981.481	592.5926	1388.889	87500
1972.222	583.3333	1388.889	86111.11
1962.963	574.0741	1388.889	84722.22
1953.704	564.8148	1388.889	83333.33
1944.444	555.5556	1388.889	81944.44
1935.185	546.2963	1388.889	80555.56
1925.926	537.037	1388.889	79166.67
1916.667	527.7778	1388.889	77777.78
1907.407	518.5185	1388.889	76388.89
1898.148	509.2593	1388.889	75000
1888.889	500	1388.889	73611.11
1879.63	490.7407	1388.889	72222.22
1870.37	481.4815	1388.889	70833.33
1861.111	472.2222	1388.889	69444.44
1851.852	462.963	1388.889	68055.56
1842.593	453.7037	1388.889	66666.67
1833.333	444.4444	1388.889	65277.78
1824.074	435.1852	1388.889	63888.89
1814.815	425.9259	1388.889	62500
1805.556	416.6667	1388.889	61111.11
1796.296	407.4074	1388.889	59722.22
1787.037	398.1481	1388.889	58333.33
1777.778	388.8889	1388.889	56944.44
1768.519	379.6296	1388.889	55555.56
1759.259	370.3704	1388.889	54166.67
1750	361.1111	1388.889	52777.78
1740.741	351.8519	1388.889	51388.89
1731.481	342.5926	1388.889	50000
1722.222	333.3333	1388.889	48611.11
1712.963	324.0741	1388.889	47222.22
1703.704	314.8148	1388.889	45833.33
1694.444	305.5556	1388.889	44444.44
1685.185	296.2963	1388.889	43055.56
1675.926	287.037	1388.889	41666.67
1666.667	277.7778	1388.889	40277.78
1657.407	268.5185	1388.889	38888.89
1648.148	259.2593	1388.889	37500
1638.889	250	1388.889	36111.11
1629.63	240.7407	1388.889	34722.22
1620.37	231.4815	1388.889	33333.33
1611.111	222.2222	1388.889	31944.44
1601.852	212.963	1388.889	30555.56
1592.593	203.7037	1388.889	29166.67
1583.333	194.4444	1388.889	27777.78
1574.074	185.1852	1388.889	26388.89
1564.815	175.9259	1388.889	25000
1555.556	166.6667	1388.889	23611.11
1546.296	157.4074	1388.889	22222.22
1537.037	148.1481	1388.889	20833.33
1527.778	138.8889	1388.889	19444.44

1518.519	129.6296	1388.889	18055.56
1509.259	120.3704	1388.889	16666.67
1500	111.1111	1388.889	15277.78
1490.741	101.8519	1388.889	13888.89
1481.481	92.59259	1388.889	12500
1472.222	83.33333	1388.889	11111.11
1462.963	74.07407	1388.889	9722.222
1453.704	64.81481	1388.889	8333.333
1444.444	55.55556	1388.889	6944.444
1435.185	46.2963	1388.889	5555.556
1425.926	37.03704	1388.889	4166.667
1416.667	27.77778	1388.889	2777.778
1407.407	18.51852	1388.889	1388.889
1398.148	9.259259	1388.889	0.00

54500

54500

d

116666.7