

# The Magic of Compound Interest on a “6%” Loan

30-year \$100,000 loan at 6%:

Summary	
Principal borrowed:	\$100,000.00
Regular Payment amount:	\$599.55
Final Balloon Payment:	\$0.00
Interest-only payment:	\$500.00
*Total Repaid:	\$215,838.00
*Total Interest Paid:	\$115,838.00
Annual Payments:	12
Total Payments:	360 (30.00 years)
Annual interest rate:	6.00%
Periodic interest rate:	0.5000%
Debt Service Constant:	7.1946%
*Total interest paid as a percentage of Principal:	115.838%

So the real, compounded interest is 115.9%.

15-year \$100,000 loan at 6%:

Summary	
Principal borrowed:	\$100,000.00
Regular Payment amount:	\$843.86
Final Balloon Payment:	\$0.00
Interest-only payment:	\$500.00
*Total Repaid:	\$151,894.80
*Total Interest Paid:	\$51,894.80
Annual Payments:	12
Total Payments:	180 (15.00 years)
Annual interest rate:	6.00%
Periodic interest rate:	0.5000%
Debt Service Constant:	10.1263%
*Total interest paid as a percentage of Principal:	51.895%

So the real, compounded interest is 51.9%.

6-year \$100,000 loan at 6%:

Summary	
Principal borrowed:	\$100,000.00
Regular Payment amount:	\$1,657.29
Final Balloon Payment:	\$0.00
Interest-only payment:	\$500.00
*Total Repaid:	\$119,324.88
*Total Interest Paid:	\$19,324.88
Annual Payments:	12
Total Payments:	72 (6.00 years)
Annual interest rate:	6.00%
Periodic interest rate:	0.5000%
Debt Service Constant:	19.8875%
*Total interest paid as a percentage of Principal:	19.325%

So the real, compounded interest is 19.3%. (source: <http://www.bretwhissel.net/cgi-bin/amortize> – see also next page)

Most people don’t understand how great the compounded interest is on longer-term loans. It amounts to debt slavery: you must fork over much of your income to the banks who “own you.” That’s why in the Bible, the Lord put a six-year limit on loans: *“In the seventh year you must declare a cancellation of debts. This is the nature of the cancellation: Every creditor must remit what he has loaned to another person; he must not force payment from his fellow Israelite, for it is to be recognized as ‘the LORD’s cancellation of debts’”* (Deuteronomy 15:1-2). And in verse 12: *“If your fellow Hebrew, whether male or female, is sold to you and serves you for six years, then in the seventh year you must let that servant go free.”*

At the end of six years the creditors were commanded to cancel debts and free their slaves: this is because slavery was often the result of debt. These rules state that servants are to be indentured for only six years and lenders make no more than six-year loans. Why? Because money-lenders knew The Magic of Compound Interest over longer terms: it can amount to more than the principal borrowed. In year-1 of a 30-year \$100,000 loan, you’ve reduced the principal by only \$1,228.00 and you’ve given the bank \$5,966.60 in interest, or about 500% interest (see the next page). By year-6 it’s cumulative \$8,602.03 on principal and cumulative \$34,565.57 on interest, or about 250% interest. This is also why lenders want you to refinance – “get the cash from your equity” – they make much more money up-front on new mortgages for another 30 years.

Bankers would much rather lend \$300,000 for 30 years to one person who buys a \$300,000 home (the bank gets 250% interest in the first 6 years) than lending \$300,000 for 6 years to four people who buy \$75,000 “fixer uppers” (the bank gets 19.3% interest in 6 years). Now you know The Magic of Compound Interest too! What’s the solution? Borrow no more than what you can pay off in six years! Start at age 22 with a smaller loan on a “fixer-upper” and pay it off in 6 years, at age 28 move to a bigger home and pay it off in 6 years, at age 34 buy your dream home and pay it off in 6 years, then you can semi-retire at age 40. We did something similar: \$200 down became \$200,000 – so can you!

Here's the cumulative principal and interest through year-6 of a 30-year \$100,000 loan:

Pmt	Principal	Interest	Cum Prin	Cum Int	Prin Bal
1	99.55	500.00	99.55	500.00	99,900.45
2	100.05	499.50	199.60	999.50	99,800.40
3	100.55	499.00	300.15	1,498.50	99,699.85
4	101.05	498.50	401.20	1,997.00	99,598.80
5	101.56	497.99	502.76	2,494.99	99,497.24
6	102.06	497.49	604.82	2,992.48	99,395.18
7	102.57	496.98	707.39	3,489.46	99,292.61
8	103.09	496.46	810.48	3,985.92	99,189.52
9	103.60	495.95	914.08	4,481.87	99,085.92
10	104.12	495.43	1,018.20	4,977.30	98,981.80
11	104.64	494.91	1,122.84	5,472.21	98,877.16
12	105.16	494.39	1,228.00	5,966.60	98,772.00
13	105.69	493.86	1,333.69	6,460.46	98,666.31
14	106.22	493.33	1,439.91	6,953.79	98,560.09
15	106.75	492.80	1,546.66	7,446.59	98,453.34
16	107.28	492.27	1,653.94	7,938.86	98,346.06
17	107.82	491.73	1,761.76	8,430.59	98,238.24
18	108.36	491.19	1,870.12	8,921.78	98,129.88
19	108.90	490.65	1,979.02	9,412.43	98,020.98
20	109.45	490.10	2,088.47	9,902.53	97,911.53
21	109.99	489.56	2,198.46	10,392.09	97,801.54
22	110.54	489.01	2,309.00	10,881.10	97,691.00
23	111.10	488.45	2,420.10	11,369.55	97,579.90
24	111.65	487.90	2,531.75	11,857.45	97,468.25
25	112.21	487.34	2,643.96	12,344.79	97,356.04
26	112.77	486.78	2,756.73	12,831.57	97,243.27
27	113.33	486.22	2,870.06	13,317.79	97,129.94
28	113.90	485.65	2,983.96	13,803.44	97,016.04
29	114.47	485.08	3,098.43	14,288.52	96,901.57
30	115.04	484.51	3,213.47	14,773.03	96,786.53
31	115.62	483.93	3,329.09	15,256.96	96,670.91
32	116.20	483.35	3,445.29	15,740.31	96,554.71
33	116.78	482.77	3,562.07	16,223.08	96,437.93
34	117.36	482.19	3,679.43	16,705.27	96,320.57
35	117.95	481.60	3,797.38	17,186.87	96,202.62
36	118.54	481.01	3,915.92	17,667.88	96,084.08
37	119.13	480.42	4,035.05	18,148.30	95,964.95
38	119.73	479.82	4,154.78	18,628.12	95,845.22
39	120.32	479.23	4,275.10	19,107.35	95,724.90
40	120.93	478.62	4,396.03	19,585.97	95,603.97
41	121.53	478.02	4,517.56	20,063.99	95,482.44
42	122.14	477.41	4,639.70	20,541.40	95,360.30
43	122.75	476.80	4,762.45	21,018.20	95,237.55
44	123.36	476.19	4,885.81	21,494.39	95,114.19
45	123.98	475.57	5,009.79	21,969.96	94,990.21
46	124.60	474.95	5,134.39	22,444.91	94,865.61
47	125.22	474.33	5,259.61	22,919.24	94,740.39
48	125.85	473.70	5,385.46	23,392.94	94,614.54
49	126.48	473.07	5,511.94	23,866.01	94,488.06
50	127.11	472.44	5,639.05	24,338.45	94,360.95
51	127.75	471.80	5,766.80	24,810.25	94,233.20
52	128.38	471.17	5,895.18	25,281.42	94,104.82
53	129.03	470.52	6,024.21	25,751.94	93,975.79
54	129.67	469.88	6,153.88	26,221.82	93,846.12
55	130.32	469.23	6,284.20	26,691.05	93,715.80
56	130.97	468.58	6,415.17	27,159.63	93,584.83
57	131.63	467.92	6,546.80	27,627.55	93,453.20
58	132.28	467.27	6,679.08	28,094.82	93,320.92
59	132.95	466.60	6,812.03	28,561.42	93,187.97
60	133.61	465.94	6,945.64	29,027.36	93,054.36
61	134.28	465.27	7,079.92	29,492.63	92,920.08
62	134.95	464.60	7,214.87	29,957.23	92,785.13
63	135.62	463.93	7,350.49	30,421.16	92,649.51
64	136.30	463.25	7,486.79	30,884.41	92,513.21
65	136.98	462.57	7,623.77	31,346.98	92,376.23
66	137.67	461.88	7,761.44	31,808.86	92,238.56
67	138.36	461.19	7,899.80	32,270.05	92,100.20
68	139.05	460.50	8,038.85	32,730.55	91,961.15
69	139.74	459.81	8,178.59	33,190.36	91,821.41
70	140.44	459.11	8,319.03	33,649.47	91,680.97
71	141.15	458.40	8,460.18	34,107.87	91,539.82
72	141.85	457.70	8,602.03	34,565.57	91,397.97