

The Power of Compounding

If you invest \$600 a year (that's \$12.50 a week) for the first eight years of a 40 year period with annual compounding of 10%, you will earn more than someone who invests \$600 a year from years 9 through 40.

What does "compounding" mean???

Everest



Great question Everest! First, you need to know some definitions:

The money you put into the bank to begin with (the \$600 each year in this example) is called "*the principle.*"

The amount the bank (or other financial institution) agrees to pay you for letting them hold onto your money is called "*interest.*" This example shows 10% interest per year.

If you leave your money in the bank and don't touch it, at the end of the year you'll have *the principle* PLUS *the interest* in your account (in this example, it would be $600 + 126 = 726$).

Next year when you put in \$600 more, you'll then be earning interest on THAT \$600 plus the \$726 from last year ($600 + 726 = 1326$). In other words, you're not just getting interest on the principle, you're getting interest on the interest the bank has already paid you! That's called "*compound interest.*"

Compounding is a process that causes the value of your investment to rapidly become higher over time due to *compound interest* – you get interest on interest on interest and so on.

So the longer you leave your money in the bank, the more it will earn for you!

Year	Early Funding		Late Funding	
	Contribution	Year-End Value	Contribution	Year-End Value
1	\$600	\$660	\$0	\$0
2	\$600	\$1,326	\$0	\$0
3	\$600	\$2,059	\$0	\$0
4	\$600	\$2,864	\$0	\$0
5	\$600	\$3,751	\$0	\$0
6	\$600	\$4,726	\$0	\$0
7	\$600	\$5,799	\$0	\$0
8	\$600	\$6,978	\$0	\$0
9	\$0	\$7,676	\$600	\$660
10	\$0	\$8,444	\$600	\$1,326
11	\$0	\$9,288	\$600	\$2,059
12	\$0	\$10,217	\$600	\$2,864
13	\$0	\$11,239	\$600	\$3,751
14	\$0	\$12,363	\$600	\$4,726
15	\$0	\$13,599	\$600	\$5,799
16	\$0	\$14,959	\$600	\$6,978
17	\$0	\$16,455	\$600	\$8,276
18	\$0	\$18,100	\$600	\$9,704
19	\$0	\$19,910	\$600	\$11,274
20	\$0	\$21,901	\$600	\$13,002
21	\$0	\$24,092	\$600	\$14,902
22	\$0	\$26,501	\$600	\$16,992
23	\$0	\$29,151	\$600	\$19,291
24	\$0	\$32,066	\$600	\$21,820
25	\$0	\$35,272	\$600	\$24,603
26	\$0	\$38,800	\$600	\$27,663
27	\$0	\$42,680	\$600	\$31,029
28	\$0	\$46,948	\$600	\$34,732
29	\$0	\$51,642	\$600	\$38,805
30	\$0	\$56,807	\$600	\$43,286
31	\$0	\$62,487	\$600	\$48,214
32	\$0	\$68,736	\$600	\$53,636
33	\$0	\$75,610	\$600	\$59,599
34	\$0	\$83,170	\$600	\$66,159
35	\$0	\$91,488	\$600	\$73,375
36	\$0	\$100,636	\$600	\$81,313
37	\$0	\$110,700	\$600	\$90,044
38	\$0	\$121,770	\$600	\$99,648
39	\$0	\$133,947	\$600	\$110,213
40	\$0	\$147,342	\$600	\$121,834
Investment	\$4,800		\$19,200	
Earnings		\$142,542		\$102,634

\$14,400 more was invested in the "Late" example but there was **\$40,000 less** in earnings - just from starting early and taking advantage of *compound interest*!