



## Compounding to Wealth

The Theory of Compounding is something so important it should be taught to all high school students. It is the concept of the time value of money and the benefits can only fully be realized if they are understood from the youngest possible age.

---

**When asked, "What was the most amazing invention of the 20th century?", Albert Einstein replied, "Compounding interest."**

---

The fact is that few adults of any age understand the concept, let alone young adults.

Notice in the tables at the right that Investor A begins making contributions to his IRA at the age of 19. For seven sequential years he puts \$2,000 into his IRA at an average growth rate of 10% tax-deferred. After seven years he makes no more contributions.

Investor B is not able to make any contributions until age 26. At that point he makes a \$2,000 contribution every year until he is 65 years old. He also earns a 10% annual return tax-deferred.

The results for both are pretty amazing! Investor A made his contributions earlier, but only made 7 contributions. He ends up with more money than Investor B who made 39 consecutive contributions but at a later age. Simply, this is the time value of money.

Notice that Investor A contributed a total of \$14,000 and Investor B contributed a total of \$80,000. And, Investor A's money grew 66-fold and Investor B's money grew 11-fold.

Also notice how dramatically the compounding sums increase in the later years. This pattern is called a geometric progression.

I find this a truly amazing example of how money grows itself. I call it "Making money while we sleep".

Please take the time to share this example of compounding with young people ... perhaps your son or daughter, or possibly young friends. It has the potential to make a very positive impact on their lives. And, don't forget to apply it to *your* life as well.

| Age                     | Investor A   |                  | Investor B   |                  |
|-------------------------|--------------|------------------|--------------|------------------|
|                         | Contribution | Yr-End Value     | Contribution | Yr-End Value     |
| 19                      | \$2,000      | \$2,200          | \$0          | \$0              |
| 20                      | \$2,000      | \$4,620          | \$0          | \$0              |
| 21                      | \$2,000      | \$7,282          | \$0          | \$0              |
| 22                      | \$2,000      | \$10,210         | \$0          | \$0              |
| 23                      | \$2,000      | \$13,431         | \$0          | \$0              |
| 24                      | \$2,000      | \$16,974         | \$0          | \$0              |
| 25                      | \$2,000      | \$20,872         | \$0          | \$0              |
| 26                      | \$0          | \$22,959         | \$2,000      | \$2,200          |
| 27                      | \$0          | \$25,255         | \$2,000      | \$4,620          |
| 28                      | \$0          | \$27,780         | \$2,000      | \$7,282          |
| 29                      | \$0          | \$30,558         | \$2,000      | \$10,210         |
| 30                      | \$0          | \$33,614         | \$2,000      | \$13,431         |
| 31                      | \$0          | \$36,976         | \$2,000      | \$16,974         |
| 32                      | \$0          | \$40,673         | \$2,000      | \$20,872         |
| 33                      | \$0          | \$44,741         | \$2,000      | \$25,159         |
| 34                      | \$0          | \$49,215         | \$2,000      | \$29,875         |
| 35                      | \$0          | \$54,136         | \$2,000      | \$35,062         |
| 36                      | \$0          | \$59,550         | \$2,000      | \$40,769         |
| 37                      | \$0          | \$65,505         | \$2,000      | \$47,045         |
| 38                      | \$0          | \$72,055         | \$2,000      | \$53,950         |
| 39                      | \$0          | \$79,261         | \$2,000      | \$61,545         |
| 40                      | \$0          | \$87,187         | \$2,000      | \$69,899         |
| 41                      | \$0          | \$95,905         | \$2,000      | \$79,089         |
| 42                      | \$0          | \$105,496        | \$2,000      | \$89,198         |
| 43                      | \$0          | \$116,045        | \$2,000      | \$100,318        |
| 44                      | \$0          | \$127,650        | \$2,000      | \$112,550        |
| 45                      | \$0          | \$140,415        | \$2,000      | \$126,005        |
| 46                      | \$0          | \$154,456        | \$2,000      | \$140,805        |
| 47                      | \$0          | \$169,902        | \$2,000      | \$157,086        |
| 48                      | \$0          | \$186,892        | \$2,000      | \$174,995        |
| 49                      | \$0          | \$205,561        | \$2,000      | \$194,694        |
| 50                      | \$0          | \$226,140        | \$2,000      | \$216,364        |
| 51                      | \$0          | \$248,754        | \$2,000      | \$240,200        |
| 52                      | \$0          | \$273,629        | \$2,000      | \$266,420        |
| 53                      | \$0          | \$300,992        | \$2,000      | \$295,262        |
| 54                      | \$0          | \$331,091        | \$2,000      | \$326,988        |
| 55                      | \$0          | \$364,200        | \$2,000      | \$361,887        |
| 56                      | \$0          | \$400,620        | \$2,000      | \$400,276        |
| 57                      | \$0          | \$440,682        | \$2,000      | \$442,503        |
| 58                      | \$0          | \$484,750        | \$2,000      | \$488,953        |
| 59                      | \$0          | \$533,225        | \$2,000      | \$540,049        |
| 60                      | \$0          | \$586,548        | \$2,000      | \$590,254        |
| 61                      | \$0          | \$645,203        | \$2,000      | \$658,079        |
| 62                      | \$0          | \$709,723        | \$2,000      | \$726,087        |
| 63                      | \$0          | \$780,695        | \$2,000      | \$800,896        |
| 64                      | \$0          | \$858,765        | \$2,000      | \$883,185        |
| 65                      | \$0          | \$944,641        | \$2,000      | \$973,704        |
| <b>Less Investment:</b> |              | (\$14,000)       |              | (\$80,000)       |
| <b>Total</b>            |              | <b>\$930,641</b> |              | <b>\$893,704</b> |
| <b>Money Grew:</b>      |              | <b>66-Fold</b>   |              | <b>11-Fold</b>   |

**Please call if you have any questions.**

Source of figures: Market Logic