Compound Interest Calculator

See How Your Money Grows Over Time

Calculate Compound Interest

Principal (Initial Amount)

1000

The starting amount you invest or save

Annual Interest Rate (%)

5

The yearly interest rate (APY)

Time Period (Years)

10

How long you'll keep the money invested

Compounding Frequency

Monthly (12x/year)

How often interest is calculated and added

Monthly Contribution (Optional)

0

Additional amount added each month

Your Results

Future Value

$1647.01

Total Interest Earned

$647.01

Total Contributions

$1000.00

Effective Annual Rate

5.12%

Compare Compounding Frequencies

See how different compounding frequencies affect your final balance:

Annually

$1628.89

Final Balance

Quarterly

$1643.62

Final Balance

Monthly

$1647.01

Final Balance

Daily

$1648.66

Best Option

Rule of 72 Quick Calculator

The Rule of 72 is a quick way to estimate how long it takes for your money to double at a given interest rate.

Interest Rate: 6 %

12.0

years to double your money

Formula: Years to Double = 72 / Interest Rate

Year-by-Year Growth

Year	Starting Balance	Interest Earned	Contributions	Ending Balance
1	**$1000.00**	**$51.16**	**$0.00**	**$1051.16**
2	$1051.16	$53.78	$0.00	$1104.94
3	$1104.94	$56.53	$0.00	$1161.47
4	$1161.47	$59.42	$0.00	$1220.90
5	**$1220.90**	**$62.46**	**$0.00**	**$1283.36**
6	$1283.36	$65.66	$0.00	$1349.02
7	$1349.02	$69.02	$0.00	$1418.04
8	$1418.04	$72.55	$0.00	$1490.59
9	$1490.59	$76.26	$0.00	$1566.85
10	**$1566.85**	**$80.16**	**$0.00**	**$1647.01**

Compound Interest Formula

$$A = P(1 + r/n)^{nt}$$

A = Final amount (future value)

P = Principal (initial investment)

r = Annual interest rate (decimal)

n = Compounding frequency per year

t = Time in years

Note: Add regular contributions separately