The FinancialU

FREE GUIDE

The Rule of 72

A quick way to estimate how long it takes money to double.

72 ÷ your rate = years to double

Use the rate as a whole number. At 9% a year: 72 ÷ 9 = 8, so money doubles in about 8 years.[1]

How close is the shortcut?

The Rule of 72 is an estimate. Here it is next to the exact answer for money that grows once a year at a steady rate, plus what a single $1,000 deposit could become after 36 years.

Yearly rate	Rule of 72 estimate	Exact years to double	$1,000 after 36 years
2%	36 years	35.0 years	$2,040
3%	24 years	23.4 years	$2,898
4%	18 years	17.7 years	$4,104
6%	12 years	11.9 years	$8,147
8%	9 years	9.0 years	$15,968
9%	8 years	8.0 years	$22,251
10%	7.2 years	7.3 years	$30,913
12%	6 years	6.1 years	$59,136

Exact figures assume yearly compounding, no added deposits, and no taxes or fees.

Watch it double: one $5,000 deposit at 8%

At 8%, the rule says money doubles about every 9 years (72 ÷ 8 = 9). Leave $5,000 alone for 36 years and it doubles four times.[2]



With exact yearly compounding, the result is about $79,840, very close to the rule's estimate.[2]

Sources

1. U.S. Securities and Exchange Commission, "Creating Choices: The Rule of 72"
www.sec.gov/investor/projectchange/creating_choices.shtml

2. Federal Reserve Bank of St. Louis, "How Compound Interest Works & How to Estimate It"
www.stlouisfed.org/open-vault/2018/september/how-compound-interest-works

Time Is the Secret Ingredient

Each doubling builds on the one before it, so the early years matter most. Here is one $10,000 deposit growing at 8% until age 61, depending on when it starts.

Starts at age 25

36 years · 4 doublings

$160,000

Rule of 72 estimate

Exact: about $159,682

Starts at age 34

27 years · 3 doublings

$80,000

Rule of 72 estimate

Exact: about $79,881

Starts at age 43

18 years · 2 doublings

$40,000

Rule of 72 estimate

Exact: about $39,960

Waiting 9 years cuts the result in half. Starting even a small amount early, for yourself or a child or grandchild, gives your money more time to double.

The rule works both ways

Credit card debt at 24%

About 3 years

An unpaid balance can double in about 3 years (72 ÷ 24 = 3) if no payments are made and interest keeps adding up.

Inflation at 3%

About 24 years

Prices can double in about 24 years (72 ÷ 3 = 24), which means the same dollars buy about half as much.

Try it yourself

My expected yearly rate: _____ %

72 ÷ _____ = _____ years to double

Amount I can set aside today: $ _____

Years until my goal: _____ ÷ years to double = _____ doublings

Estimated value: $ _____ × 2 for each doubling = $ _____

Keep in mind

The Rule of 72 is a rule of thumb, not a promise. Real returns go up and down, investments can lose value, and taxes and fees reduce growth. For exact numbers, try the free compound interest calculator at Investor.gov.

investor.gov/financial-tools-calculators/calculators/compound-interest-calculator