Financial fitness

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How Long Will It Take For Your Money To Double? *Use The Rule Of 72*

The "Rule of 72" has been a staple of finance for centuries, with roots dating back to Summa de Arithmetica by Fra Luca Pacioli, the so-called Father (yes, literally…) of Accounting and collaborator with Leonardo da Vinci. He wrote in 1494:

In wanting to know of any capital, at a given yearly percentage, in how many years it will double adding the interest to the capital, keep as a rule 72 in mind, which you will always divide by the interest, and what results, in that many years it will be doubled.

It's a very handy rule to know. Let's apply it to your finances.

Let's say you've determined that you'll need around $200,000 a year to maintain your lifestyle in retirement. You then remember my article from September on the 4% Rule that said you ought to be able to safely withdraw 4% per year with minimal capital erosion. With a little quick math, you quickly determine that you'll need to have an investible pool of $5 million such that 4% comes out to $200,000 per year.

Your pool, however, is currently only $2.5 million. And you want to know: How long will it take to double? You can very quickly come up with a pretty close estimate, if you know (a) the growth rate of your investments, (b) and the Rule of 72:
72 / Growth Rate = Years to Double

If, for example, your pool was earning 3% per year, you'd take 72 and divide it by 3 to determine that you'd need 24 years for it to double. How about 7%? 72 / 7 = 10.3 years.

The Rule of 72 can also be used in reverse:
72 / Years to Double = Growth Rate

Continuing with our example, if you wanted to retire in 10 years, what growth rate would you need on your investments to meet your goal? Take 72 and divide by 10 = 7.2% growth rate.

Pretty simple, right? OK, let's check your understanding with this quiz:

You've set aside $50,000 for your newborn daughter to go to college. It's been estimated that her college will cost $200,000 by the time she's ready to go. If you didn't add another penny to your $50,000 pool, what growth rate will you need over the next 18 years to get it to $200,000?

Answer: You'll need four times what you have currently – that's back-to-back doubles. So you have nine years to complete each double. 72 / 9 = 8% growth rate.

Isn't math fun?!

Robert A. "Rocky" Mills is a registered representative with and securities offered through LPL Financial, Member FINRA/SIPC. Investment advice offered through Westlake Investment Advisors, a registered investment advisor and separate entity from LPL Financial.

The rule of 72 is a mathematical concept and does not guarantee investment results nor functions as a predictor of how an investment will perform. It is an approximation of the impact of a targeted rate of return. Investments are subject to fluctuating returns and there is no assurance that any investment will double in value.