

RULE OF 72

Mathematic equation discovered by Albert Einstein that allows a person to easily calculate how long it will take for the principle amount of an investment or debt to double.

$$72 / \text{Interest Rate} = \text{Years to Double Investment}$$

$$72 / \text{The years it takes to Double} = \text{Interest Rate}$$

Use the Rule of 72 to answer the following questions.

1. What annual interest rate will cause your money to double in four years?
2. Tanner has invested \$500 for college. What rate of return must Tanner earn for his investment to double in six years?
3. Jerrod owes \$2,000 on a credit card that charges him an annual percentage rate of 18%. If Jerrod stopped making payments, how long would it be before the balance on his credit card reached \$4,000?
4. Because Jerrod missed a payment, the credit card company automatically raised the interest rate to 24%. How many years would it be until his balance doubles, assuming he continues to make no payments?
5. Emily got a new job that guarantees her a 6% raise every year. If she started out making \$25,000, how long will it be before she doubles her current salary?
6. If you invested \$250 at 16% interest, how much will you have after 18 years?
7. Ron and Amie invested \$5,000 in an educational savings account for their daughter when she was born. They were unable to ever add anything else to the account. What was the rate of return if they had \$10,000 in the account after 12 years?
8. Kari would like to save \$10,000 for a down payment on a house. Illustrate the difference in years it will take her to double her current \$5,000 savings based on a 6 %, 12% and 18% interest rate