



Personal Finance: Simple Interest

Let your money do
the work for you.



Lesson Objective

Students will learn how to use simple interest to calculate the value of investments.



Simple Interest Equation

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

I= Interest

P= Principle

R= Rate

T= Time



Simple Interest Equation

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

I borrow \$1000 to be paid back in one year. My interest is 10%. How much do I pay in interest?

I=

P=

R=

T=



Simple Interest Equation

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

I borrow \$1000 to be paid back in one year. My interest is 10%. How much do I pay in interest?

I= ???- this is what we are solving for.

P= \$ 1,000

R= 10% or .10

T= 1 year

$$I = P \times R \times T$$

$$I = 1,000 \times .10 \times 1$$

$$I = \mathbf{\$100}$$



Simple Interest Equation

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

Now you try: You borrow \$500 to be paid back in two years. Your interest is 3%. How much do you pay in interest?

I=

P=

R=

T=



Simple Interest Equation

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

Now you try: You borrow \$500 to be paid back in two years. Your interest is 3%. How much do you pay in interest?

I= ???- this is what we are solving for.

P= \$ 500

R= 3% or .03

T= 2 years

$$I = P \times R \times T$$

$$I = 500 \times .03 \times 2$$

$$I = \mathbf{\$30}$$



Practice

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

Problem 1:

I borrow \$11,500 to be paid back in five years. My interest is 4%. How much do I pay in interest?

Problem 2:

I borrow \$300 to be paid back in one year. My interest is 16%. How much do I pay in interest?

Problem 3:

I borrow \$650 to be paid back in three years. My interest is 7%. How much do I pay in interest?



Practice

$$INTEREST = PRINCIPLE \times RATE \times TIME$$

$$I = P \times R \times T$$

Problem 1:

I borrow \$11,500 to be paid back in five years. My interest is 4%. How much do I pay in interest?

$$I = 11,500 \times .04 \times 5 = \$2,300$$

Problem 2:

I borrow \$300 to be paid back in one year. My interest is 16%. How much do I pay in interest?

$$I = 300 \times .16 \times 1 = \$48$$

Problem 3:

I borrow \$650 to be paid back in three years. My interest is 7%. How much do I pay in interest?

$$I = 650 \times .07 \times 3 = \$136.50$$



Review:

1. What is the equation for simple interest?
2. I borrow \$2000 to be paid back in 5 years. My interest is 10% annually. How much interest do I pay?
3. What if I lend \$2000, and the interest is 12% annually. How much interest do I earn if the loan is for 3 years?



Review:

1. What is the equation for simple interest?

$$I = P \times R \times T$$

P = Principle, or loan amount

R = Interest rate as a decimal

T = The time the loan is for

2. I borrow \$2000 to be paid back in 5 years. My interest is 10% annually. How much interest do I pay?

$$I = \$2000 \times 0.10 \times 5 = \$1000$$

3. What if I lend \$2000, and the interest is 12% annually. How much interest do I earn if the loan is for 3 years?

$$I = \$2000 \times 0.12 \times 3 = \$720$$