

# Simple Interest

10/15

$$I = P \cdot r \cdot t$$

↑ Interest  
↑ Principle (starting amount)  
↑ rate (%) Written as a decimal  
← time in Years.

2 types of Interest problems:

1. Just Find amount of Interest
2. Find total (you'll need to add)

Jenny puts \$1,560 into a savings account. The account pays 2.5% simple interest. How much will she earn in 3 years?

$$I = Prt \rightarrow 0.025$$

$$I = 1560 \times 0.025 \times 3$$

$$I = \$117$$

Marcos invests \$760 into a savings account. The account pays 4% simple interest. How much interest will he earn after 5 years?

$$I = Prt$$

$$760 \cdot 0.04 \cdot 5$$

$$I = \$152$$

Mrs. Hanover borrows \$1,400 at a rate of 5.5% per year. How much simple interest will she pay if it takes 8 months to repay the loan?

2nd back arrow

$$I = Prt$$

$$I = 1400 \times 0.055 \times \frac{8}{12}$$

$$I = 51\frac{1}{3} = \$51.33$$

$\frac{8}{12} = \frac{2}{3}$

An office manager charged \$425 worth of office supplies on a credit card. The credit card has an interest rate of 9.9%. How much money will he owe at the end of one month if he makes no other charges on the card and does not make a payment?

$$I = Prt$$

$$I = 425 \times 0.099 \times \frac{1}{12}$$

$$I = \$3.51$$

425.00	
+ 3.51	
428.51	

Maggie is taking out a student loan for \$2,600. She plans on paying off the loan in 3 years. At the end of 3 years, Maggie will have paid \$390 in interest. What is the simple interest rate on the student loan?