

Percents

Simple Interest

What is Interest?

Amount charged for
_____ or _____ money





What is Balance?

The _____ amount of money owed.



Vocabulary

Principle

The amount that is _____



Rate

The _____ that you are charging for interest

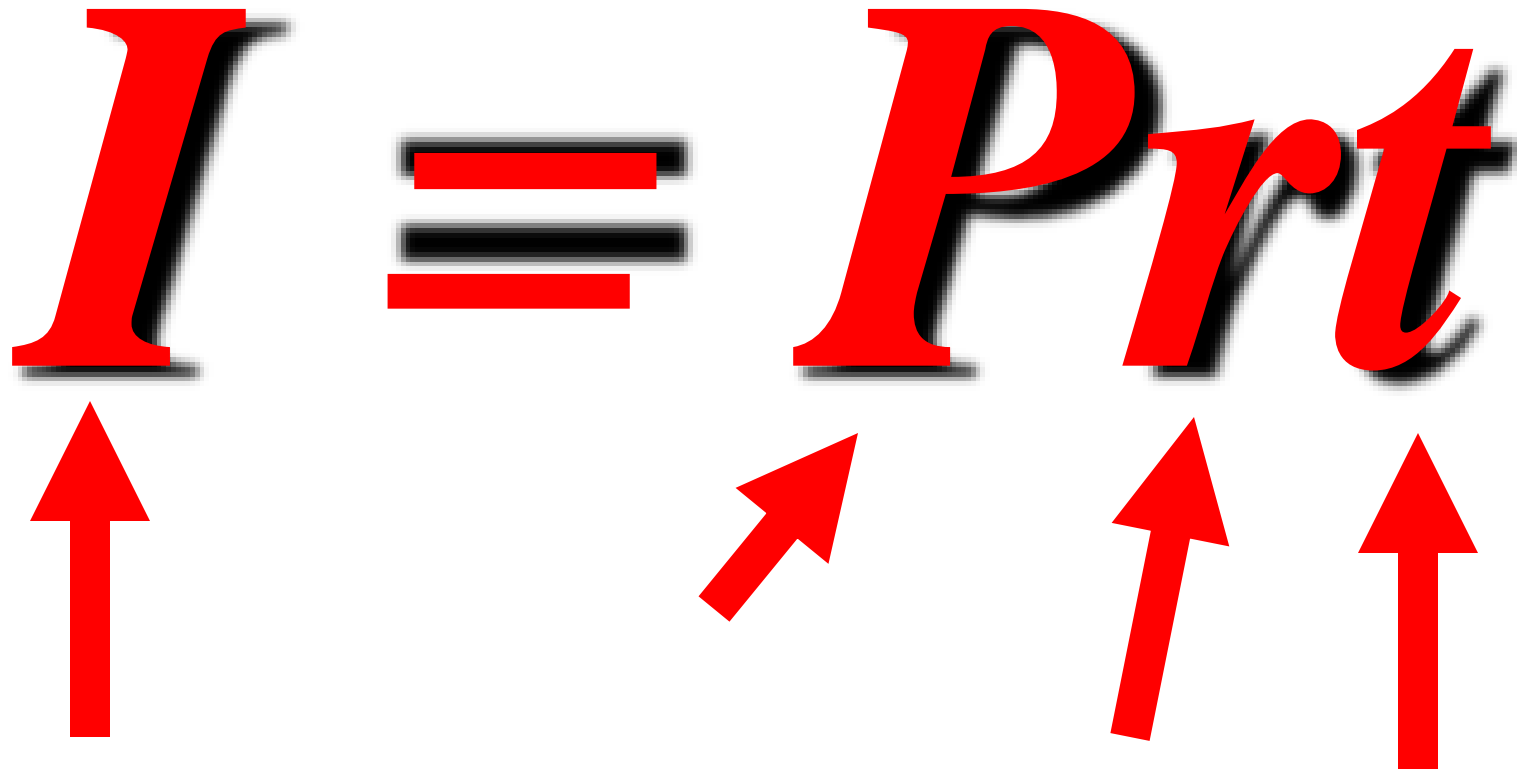


Time

Time in Simple Interest is always done in

_____.

Interest Formula

$$***I*** = ***Prt***$$


The diagram illustrates the interest formula $I = Prt$. The variables are represented by large, bold, red, italicized letters. Below the letters, red arrows point upwards to identify each component: a vertical arrow points to I , a diagonal arrow points to P , a vertical arrow points to r , and a vertical arrow points to t .

Getting to know the vocabulary

Josh borrowed \$2000 from Jason. Jason is charging 10% for every year that Josh borrows it. How much interest will Josh have to pay in 4 years? How much is his total balance?

Find the amount of interest and the balance.

1) P = \$600
r = 5%
t = 5 years

$$***I = Prt***$$

Find the amount of interest and the balance.

2) P = \$4500

r = 10%

t = 6 years

$$***I = Prt***$$

How many months are there in a year?

How do you convert months to fractions/decimals of a year?

Write the following as parts of a year:

3) 6 months

7) 18 months

4) 3 months

5) 9 months

6) 6 months

Find the amount of interest and the balance.

8) P = \$1200

r = 5%

t = 3 months

$$***I = Prt***$$

Find the amount of interest and the balance.

9) P = \$7000
r = 5.5%
t = 18 months

$$***I = Prt***$$

Find the amount of borrowed (principle).

10)

$$I = \$68$$

$$P = ?$$

$$r = 4\%$$

$$t = 2 \text{ years}$$

$$*I = Prt*$$

Find the interest rate.

11)

$$I = \$6.75$$

$$P = \$90$$

$$r = ?$$

$$t = 3 \text{ years}$$

$$*I = Prt*$$

12. You deposit \$2000 in a savings account for 3 months. If the annual simple interest rate is 4.1%, how much interest will you earn?

13. You borrow \$4500 for 9 months. If the annual simple interest rate is 8%, how much interest will you owe?

13. You borrow \$120. After 9 months, you pay back the \$120 plus interest of \$5.40. What is the annual simple interest rate?

14. You deposit \$800 at 7.5%. How long will it take to earn \$15 interest?