

# Simple Interest

## Example 4:

Mackenzie invested \$3500 in a mutual fund at a yearly rate of 6%. She earned \$945 in interest? For how long was the money invested?

## Example 5:

Mrs. Smith invested \$4000 in a bond with a yearly interest rate of 4%. Her total interest on the investment was \$800. What was the length of the investment?

$$I = p r t$$

Formula

# Interest: \_\_\_\_\_

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## Example 1:

To buy a car, Mitchell borrowed \$17,000 for 3 years at an annual simple interest rate of 9%. If it takes him the full 3 years to pay off the loan, how much interest will he pay?

## Example 2:

Keith's parents deposited \$2500 into a savings account as a college fund when he was born. How much will Keith have in his account after 18 years at a yearly simple interest rate of 3.75%?

## Example 6:

Mr. McGee borrowed \$8000 for 4 years to make improvements at his restaurant. If he repaid a total of \$10,320, at what interest rate did he borrow the money?

## Example 3:

A bank offers an annual simple interest rate of 7% on home improvement loans. How much would Tony owe if he borrowed \$8,000 for 18 months?

Solve for  $p$ ,  $r$ , or  $t$ .

Solve for interest ( $I$ ).

# Simple Interest

## Example 4:

Mackenzie invested \$3500 in a mutual fund at a yearly rate of 6%. She earned \$945 in interest? For how long was the money invested?

$$I = prt$$

$$\$945 = \$3500(0.06)(t)$$

$$945 = 210t$$

$$\frac{945}{210} = \frac{210t}{210}$$

$$4.5 = t$$

4.5 years

## Example 5:

Mrs. Smith invested \$4000 in a bond with a yearly interest rate of 4%. Her total interest on the investment was \$800. What was the length of the investment?

$$I = prt$$

$$I = prt$$

Principal- the amount of \$ borrowed or invested

Interest

Rate of interest (%)

Time (years)

## Formula

**Interest:** Interest is the amount of money charged for borrowing or using money (ie: car or home loan, savings, investments)

$$800 = 4000(0.04)(t)$$

$$\frac{800}{160} = \frac{160t}{160}$$

$$5 = t$$

5 years

### Example 6:

Mr. McGee borrowed \$8000 for 4 years to make improvements at his restaurant. If he repaid a total of \$10,320, at what interest rate did he borrow the money?

$$\$10,320 - \$8,000 = \$2,320 \text{ in interest}$$

$$I = prt$$

$$\$2,320 = \$8000(r)(4)$$

$$\frac{\$2,320}{3200} = \frac{3200r}{3200}$$

$$0.725 = r$$

$r = 7.25\%$

Solve for p, r, or t.

### Example 1:

To buy a car, Mitchell borrowed \$17,000 for 3 years at an annual simple interest rate of 9%. If it takes him the full 3 years to pay off the loan, how much interest will be pay?

$$I = prt$$

$$I = \$17,000(0.09)(3)$$

$$I = \$4,590$$

### Example 2:

Keith's parents deposited \$2500 into a savings account as a college fund when he was born. How much will Keith have in his account after 18 years at a yearly simple interest rate of 3.75%?

$$I = prt$$

$$I = \$2,500(0.0375)(18)$$

$$I = \$1,687.50$$

$$\$2,500 + \$1,687.50$$

$$= \$4,187.50$$

### Example 3:

A bank offers an annual simple interest rate of 7% on home improvement loans. How much would Tony owe if he borrowed \$8,000 for 18 months?

$$I = prt$$

$$I = \$8,000(0.07)(1.5)$$

$$I = \$840$$

$$\frac{18 \text{ mos}}{12 \text{ mos}} = 1.5 \text{ yr}$$

$$12 \text{ mos}$$

Solve for interest (I).

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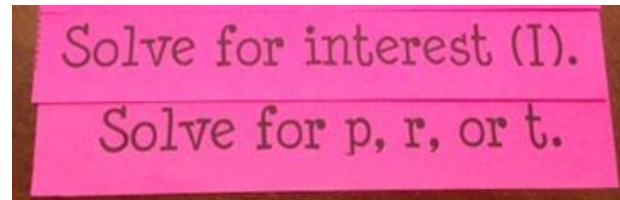
(<http://www.teacherspayteachers.com/Store/Lisa-Davenport>)

## Directions:

Step 1: Print pages 1 & 2 front to back so that the information is facing in opposite directions (My printer has the option to flip along the long edge).

Step 2: Cut the page in half (along the dotted line line).

Step 3: Line up the bottom of the two pieces as shown below.



Step 4: Fold over the top portion of both pieces, and secure with a few staples at the top.

The final product should look like this:

