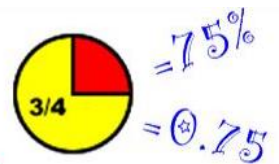




Percents and Decimals



Write Percents as Decimals

Words To write a percent as a decimal, divide by 100 and remove the % sign. This is the same as moving the decimal point two places to the left.

Example $48\% = \frac{48}{100} = 0.48$

Another way to write a fraction as a decimal is to write the percent as a fraction. Then write the fraction as a decimal.

Examples

Write each percent as a decimal.

1. 56%

$$\frac{56}{100}$$

$$56 \div 100$$

Method 1 Write the percent as a fraction.

$$56\% = \frac{56}{100}$$

Rewrite the percent as a fraction with a denominator of 100.

$$= 0.56$$

Write 56 hundredths as a decimal.

Method 2 Move the decimal point.

$$56\% = \frac{56}{100}$$

Move the decimal point two places to the left.

$$= 0.56$$

Remove the percent sign.

2. 8%

$$8\% = \frac{8}{100}$$

Rewrite the percent as a fraction with a denominator of 100.

$$= 0.08$$

Write 8 hundredths as a decimal.

$$0.08 \div 100$$

$$8\% = 0.08$$

2. Write 170% as a decimal, number in simplest form and as a decimal.

$$170\% = \frac{170}{100}$$

Definition of percent

$$= 1\frac{70}{100} \text{ or } 1\frac{7}{10}$$

Mixed number form

$$= 1.7$$

Decimal form

$$170\% = 1.7$$

Got It? Do these problems to find out.

a. 32%

$$0.32$$

b. 6%

$$0.06$$

c. 93%

$$0.93$$

a. 0.25%

$$.0025$$

b. 300%

$$3.0$$

$$3$$

c. 530%

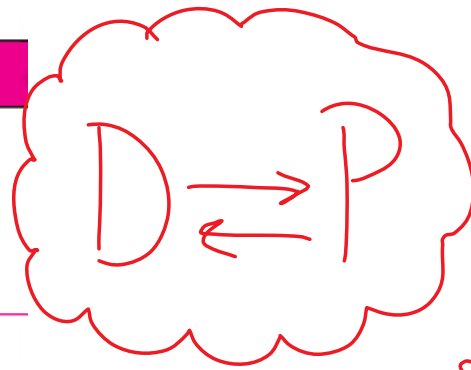
$$5.30$$

$$5.3$$

Write Decimals as Percents

Words To write a decimal as a percent, multiply by 100 and add a % sign. This is the same as moving the decimal point two places to the right.

Example $0.36 = 0.36\%$
 $= 36\%$



Always twice!

Another way to write a decimal as a percent is to write the decimal as a fraction with a denominator of 100. Then write the fraction as a percent.

Examples



4. Write 0.38 as a percent.

Method 1 Write the decimal as a percent.

$0.38 = \frac{38}{100}$ Write 38 hundredths as a fraction.
 $= 38\%$ Write the fraction as a percent.

Method 2 Move the decimal point.

$0.38 = 0.38$ Move the decimal point two places to the right.
 $= 38\%$ Add the percent sign.

5. Write 0.2 as a percent.

$0.2 = \frac{2}{10}$ Write 2 tenths as a fraction.

$\frac{2}{10} = \frac{20}{100}$ Write the equivalent fraction with a denominator of 100.
 $= 20\%$ Write the fraction as a percent.

5. Write 1.68 as a percent.

$1.68 = 1.68$ Multiply by 100.
 $= 168\%$ Add % symbol.

6. Write 0.0075 as a percent.

$0.0075 = 0.0075$ Multiply by 100.
 $= 0.75\%$ Add % symbol.

Got It? Do these problems to find out.

Write each decimal as a percent.

d. 0.47 *ua*

47%

e. 0.73 *ua*

73%

f. 0.5 *ua*

50%

g. 2.5 *ua*

250%

h. 0.004 *ua*

0.4%

i. 0.0016 *ua*

0.16%