percent – a ratio comparing a number to 100 (percent = per 100)

Writing Percents as Decimals

Words Remove the percent symbol. Then divide by 100, or just move the decimal point two places to the left.

Numbers $23\% = 23.\% = 0.23$

Write each percent as a decimal.

Ex: 52%

0.52

Ex: 7%

0.07

Ex: 100%

1

Ex: 0.7%

0.007

Writing Decimals as Percents

Words Multiply by 100, or just move the decimal point two places to the right. Then add a percent symbol.

Numbers $0.36 = 0.36 = 36\%$

Write each decimal as a percent.

Ex: 0.47

47%

Ex: 0.663

66.3%

Ex: 1.8

180%

Ex: 0.009

0.9%

Ex: On a math test, you get 46 out of a possible 50 points. Write this as a fraction (in simplest form), a decimal, and a percent.

$$\frac{46 \div 2}{50 \div 2} = \boxed{\frac{23}{25}}$$

$$\frac{46 \times 2}{50 \times 2} = \frac{92}{100} = \boxed{92\%}$$

$$92\% = \boxed{0.92} \qquad OR \qquad 50\overline{)46.00}^{\,0.92}$$

Try These:
Write each decimal as a percent and each percent as a decimal.

(1) 24%   (2) 3%   (3) 107%   (4) 92.7%

$\boxed{0.24}$ $\boxed{0.03}$ $\boxed{1.07}$ $\boxed{0.927}$

(5) 0.94   (6) 1.2   (7) 0.316   (8) 0.005

$\boxed{94\%}$ $\boxed{120\%}$ $\boxed{31.6\%}$ $\boxed{0.5\%}$

(9) Write 85 out of 100 points as a fraction (in simplest form), a decimal, and a percent.

$$\frac{85}{100} = \boxed{85\%}$$

$$\frac{85 \div 5}{100 \div 5} = \boxed{\frac{17}{20}}$$

$$85\% = \boxed{0.85}$$