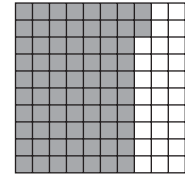


# Fractions, Decimals, and Percents

Fractions, decimals, and percents all name parts of a whole. Percent means per hundred, so 15% means 15 parts per hundred. The grid to the right has 72 out of 100 squares shaded. The shaded part can be represented with a fraction,  $\frac{72}{100}$  ( $\frac{18}{25}$  in simplest form), by a decimal, 0.72, and by a percent, 72%.



**Write 36% as a fraction in simplest form and as a decimal.**

$$36\% = \frac{36}{100} = 0.36$$

Simplify the fraction:

$$\frac{36}{100} = \frac{36 \div 4}{100 \div 4} = \frac{9}{25}$$

$$\text{So, } 36\% = \frac{9}{25} = 0.36.$$

**Write 0.47 as a fraction in simplest form and as a percent.**

$$0.47 = \frac{47}{100} = 47\%$$

**Write  $\frac{3}{4}$  as a decimal and as a percent.**

You can use a proportion or divide to help you.

Use a proportion:

$$\begin{aligned} \frac{3}{4} &= \frac{n}{100} \\ 4n &= 300 \\ n &= 75 \end{aligned}$$

Use division:

$$\begin{array}{r} 0.75 \\ 4 \overline{)3.00} \\ \underline{28} \phantom{0} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

$$\text{So, } \frac{3}{4} = \frac{75}{100} = 0.75 = 75\%.$$

Write each number in two other ways. Write fractions in simplest form.

1.  $\frac{2}{100}$  \_\_\_\_\_ ; \_\_\_\_\_

2.  $\frac{71}{100}$  \_\_\_\_\_ ; \_\_\_\_\_

3.  $\frac{9}{10}$  \_\_\_\_\_ ; \_\_\_\_\_

4. 17% \_\_\_\_\_ ; \_\_\_\_\_

5. 48% \_\_\_\_\_ ; \_\_\_\_\_

6. 60% \_\_\_\_\_ ; \_\_\_\_\_

7. 0.04 \_\_\_\_\_ ; \_\_\_\_\_

8. 0.22 \_\_\_\_\_ ; \_\_\_\_\_

9. **Writing to Explain** Jamal said that he could write a percent as a decimal by moving the decimal point two places to the left and deleting the percent sign. Is he correct? How do you know?

10. **Number Sense** Two stores sell their goods at the manufacturers' suggested retail prices, so their prices are the same. Which store has the greatest markdown from their original prices?

**GOODS 2 GO**  
 $\frac{1}{4}$  off  
original prices!

**BUY AND BYE**  
30% off  
original prices!