

11.3 Relate Percents to Decimals

How to Change Percents to Decimals:

1. Write the percent as a fraction with a denominator of 100.
2. Divide to write the fraction as a decimal.

****Make sure the denominator is a multiple of 10 in order to change it to a decimal****

How to Change Decimals to Percents:

1. Use the word name to write the decimal as a fraction.
2. Write the fraction as a percent.

Example: Write each ratio both a decimal and a percent.

1.) $\frac{51}{100}$

51%

0.51

2.) $\frac{9 \times 10}{10 \times 10} = \frac{90}{100}$

90%

0.9

3.) $\frac{3 \times 2}{5 \times 2} = \frac{6 \times 10}{10 \times 10} = \frac{60}{100}$

0.6

60%

4.) $\frac{9 \times 4}{25 \times 4} = \frac{36}{100}$

36%

0.36

Example: Write each percent as a decimal.

$$5.) 28\% = \frac{28}{100}$$

$$0.\underline{2}\underline{8}$$

$$6.) 40\% = \frac{40}{100}$$

$$0.\underline{4}\underline{0} \text{ or } 0.4$$

$$7.) 90\% = \frac{90}{100}$$

$$0.\underline{9}\underline{0} \text{ or } 0.9$$

$$8.) 25\% = \frac{25}{100}$$

$$0.\underline{2}\underline{5}$$

$$9.) 74\% = \frac{74}{100}$$

$$0.\underline{7}\underline{4}$$

$$10.) 21\% = \frac{21}{100}$$

$$0.\underline{2}\underline{1}$$

Example: Write each decimal as a percent.

$$11.) 0.10 = \frac{10}{100}$$

$$10\%$$

$$12.) 0.3 = \frac{3 \cdot 10}{10 \cdot 10} = \frac{30}{100}$$

$$30\%$$

$$13.) 0.98 = \frac{98}{100}$$

$$98\%$$

$$14.) 0.71 = \frac{71}{100}$$

$$71\%$$

$$15.) 0.14 = \frac{14}{100}$$

$$14\%$$

$$16.) 0.44 = \frac{44}{100}$$

$$44\%$$