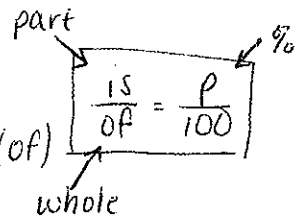


Finding the percent of a number: Use the percent proportion

Percent Proportion: compares the part (is) to the whole/total value (of)



EX. 1 Find each number. Round to the nearest tenth if necessary.

A) 8% of 125

Read as: What is  $\underbrace{x}_{x}$  is 8% of 125?

$$\frac{\text{is}}{\text{of}} = \frac{p}{100} \quad \left( \frac{x}{125} = \frac{8}{100} \right)$$

$$100x = 125 \cdot 8$$

$$\frac{100x}{100} = \frac{1000}{100}$$

$$x = 10$$

10 is 8% of 125

B) 125% of 64

What is  $\underbrace{x}_{x}$  (125% of 64)?

$$\left( \frac{x}{64} = \frac{125}{100} \right)$$

$$100x = 64 \cdot 125$$

$$\frac{100x}{100} = \frac{8000}{100}$$

$$x = 80$$

80 is 125% of 64

C)  $5\frac{1}{2}\%$  of 60

What is  $\underbrace{x}_{x}$  ( $5\frac{1}{2}\%$ ) of 60?

$$\left( \frac{x}{60} = \frac{5\frac{1}{2}}{100} \right)$$

$$100x = \frac{30}{1} \cdot \frac{11}{2}$$

$$\frac{100x}{100} = \frac{330}{100}$$

$$x = 3.3$$

3.3 is  $5\frac{1}{2}\%$  of 60

D) Mackenzie wants to buy a new backpack that costs \$50. If the tax rate is 6.5%, how much tax will she pay when she buys the backpack?

6.5% of \$50

$$\frac{\text{is}}{\text{of}} = \frac{p}{100} \quad \left( \frac{x}{50} = \frac{6.5}{100} \right)$$

$$\frac{100x}{100} = \frac{50 \cdot 6.5}{100}$$

$$x = 3.25$$

Mackenzie will pay \$3.25 in taxes.