

6-2B: The Percent Proportion

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

$$\frac{\text{part}}{\text{whole}} = \frac{p}{100} \%$$

Note: use a variable for the missing value!

Ex. 1: Find each number.

- A) What percent of 24 is 18? B) What number is 30% of 150? C) 12 is 80% of what number?

$$\frac{18}{24} = \frac{p}{100}$$

$$100 \cdot 18 = 24p$$

$$1800 = 24p$$

$$\frac{1800}{24} = \frac{24p}{24}$$

$$p = 75\%$$

$$\frac{x}{150} = \frac{30}{100}$$

$$100x = 150 \cdot 30$$

$$100x = 4500$$

$$\frac{100x}{100} = \frac{4500}{100}$$

$$x = 45$$

$$\frac{12}{x} = \frac{80}{100}$$

$$100 \cdot 12 = 80x$$

$$1200 = 80x$$

$$\frac{1200}{80} = \frac{80x}{80}$$

$$x = 15$$

- D) On the nutrition facts on a box of cereal:

Each cup provides 7% of the daily recommended value of potassium

1 cup = 260 mg of potassium

What is the daily recommended value?

260 mg is 7% of what number?

$$\frac{260}{x} = \frac{7}{100}$$

$$100 \cdot 260 = 7x$$

$$26000 = 7x$$

$$\frac{26000}{7} = \frac{7x}{7}$$

$$x \approx 3714.3 \text{ mg}$$

HW: GM7 pg. 335 (2-24 even)