

# Welcome!

## DO NOW:

- Complete your **Attendance Question** in Google Classroom!
- Today we'll be looking at our notes on **7.3**.

**Homework:** #110 MML 6.4 due TOMORROW 2/23

Quiz Ch 6 due Wednesday 2/24 (must get  $\geq 60\%$ )

#111 MML 7.1 due Friday 2/26

#112 MML 7.3 due Tuesday 3/2

### 7.3 Solving Percent Problems with Proportions

#### 7.3 Objective A: Writing Percent Problems as Proportions.

➤ <b>Key words:</b>	<b>Of</b> means <b>Multiplication</b>
	<b>Is</b> means <b>equal</b>
	<b>What</b> (or some equivalent) means the <b>unknown number</b>

#### Percent Proportion

$$\frac{\text{amount}}{\text{base}} = \frac{\text{percent}}{100} \quad \text{or} \quad \frac{a}{b} = \frac{p}{100}$$

Part of Proportion	How It's Identified
Percent	% or percent
Base	Appears after of
Amount	Part compared to whole

**Ex 1.** Translate to a proportion and solve.

a. 98% of 45 is what number?

$$\frac{*}{\%} = \frac{x}{100}$$

$$\frac{98}{100} = \frac{x}{45}$$

$$98 \cdot 45 = 100x$$

$$4410 = 100x$$

$$44.1 = x$$

b. What number is 4% of 150?

Amount  $\frac{x}{100}$   $\frac{4}{100}$  base  $\frac{150}{100}$

$$\frac{x}{150} = \frac{4}{100}$$

$$4 \cdot 150 = 100x$$

$$600 = 100x$$

$$6 = x$$

c. 14.3 is 26% of what number?

$$\frac{14.3}{0.26} = \frac{.26 \cdot x}{0.26}$$

$$55 = x$$

d. 35% of what number is 84?

$$\frac{a}{b} = \frac{p}{100}$$

$$\frac{84}{x} = \frac{35}{100}$$

$$35x = 84 \cdot 100$$

$$35x = 8400$$

$$x = 240$$

e. What percent of 400 is 1400?

$$\frac{x}{100} = \frac{400}{1400}$$

$$x = 350$$

f. 8.2 is what percent of 82?

$$\frac{8.2}{82} = \frac{x}{100}$$

$$x = 10$$