

Display Master: Key Idea: Find the Missing Value by Using the Scale Factor

- To find the missing value in a proportion, determine and use the scale factor.

Display Master: Flour to Pizzas A

$$\frac{3 \text{ cups}}{9 \text{ pizzas}} = \frac{x \text{ cups}}{36 \text{ pizzas}}$$

Display Master: Flour to Pizzas B

$$\frac{3 \text{ cups}}{9 \text{ pizzas}} \times \boxed{} = \frac{x \text{ cups}}{36 \text{ pizzas}}$$

Display Master: Flour to Pizzas C

$$\frac{3 \text{ cups} \times \boxed{4}}{9 \text{ pizzas} \times \boxed{4}} = \frac{x \text{ cups}}{36 \text{ pizzas}}$$

Display Master: Flour to Pizzas D

$$\frac{3 \text{ cups} \times \boxed{4}}{9 \text{ pizzas} \times \boxed{4}} = \frac{x \text{ cups}}{36 \text{ pizzas}}$$

$$3 \text{ cups} \times 4 = x \text{ cups}$$

$$12 = x$$

Display Master: Flour to Pizzas E

$$\frac{3 \text{ cups}}{9 \text{ pizzas}} = \frac{\boxed{12} \text{ cups}}{36 \text{ pizzas}}$$

Display Master: Dinner Party A

$$\frac{3 \text{ people}}{x \text{ pounds}} = \frac{18 \text{ people}}{30 \text{ pounds}}$$

Display Master: Dinner Party B

$$\frac{3 \text{ people} \times \boxed{}}{x \text{ pounds}} = \frac{18 \text{ people}}{30 \text{ pounds}}$$

Display Master: Dinner Party C

$$\frac{3 \text{ people} \times \boxed{6}}{x \text{ pounds} \times \boxed{6}} = \frac{18 \text{ people}}{30 \text{ pounds}}$$

Display Master: Dinner Party D

$$\frac{3 \text{ people} \times \boxed{6}}{x \text{ pounds} \times \boxed{6}} = \frac{18 \text{ people}}{30 \text{ pounds}}$$

$$x \text{ pounds} \times 6 = 30 \text{ pounds}$$

Display Master: Dinner Party E

$$\boxed{5} \text{ pounds} \times 6 = 30 \text{ pounds}$$

Display Master: Dinner Party F

$$\frac{3 \text{ people}}{\boxed{5} \text{ pounds}} = \frac{18 \text{ people}}{30 \text{ pounds}}$$