4-3: Learning Goals

- Let’s explore situations that involve division.

4-3-1: Properties of Multiplication

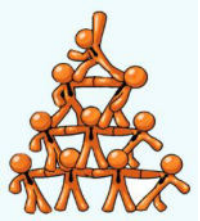
4-3-2: Homemade Jam

Draw a diagram, and write a multiplication equation to represent each of the following situations. Then answer the question.

1. Mai had 4 jars. In each jar, she put $2\frac{1}{4}$ cups of homemade blueberry jam. Altogether, how many cups of jam are in the jars?

2. Priya filled 5 jars, using a total of $7\frac{1}{2}$ cups of strawberry jam. How many cups of jam are in each jar?

3. Han had some jars. He put $\frac{3}{4}$ cup of grape jam in each jar, using a total of $6\frac{3}{4}$ cups. How many jars did he fill?



4-3-3: Making Granola

1. To make 1 batch of granola, Kiran needs 26 ounces of oats. The only measuring tool he has is a 4-ounce scoop. How many scoops will it take to measure 26 ounces of oats?

    a. Will the answer be more than 1 or less than 1?

    b. Write a multiplication equation and a division equation that represent this situation. Use "?" to represent the unknown quantity.

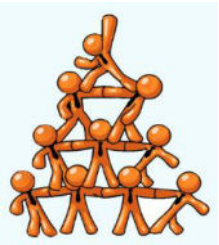
    c. Find the unknown quantity. If you get stuck, draw a diagram.

2. The recipe calls for 14 ounces of mixed nuts. To get that amount, Kiran uses 4 bags of mixed nuts.

    a. Write a mathematical question that might be asked about this situation.

    b. What might the equation $14 \div 4 = \ ?$ represent in Kiran's situation?

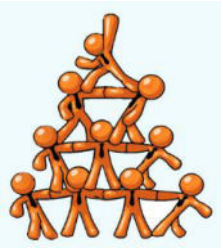
    c. Find the quotient. Show your reasoning. If you get stuck, draw a diagram.



4-3: Lesson Synthesis

What information is unknown in each situation?

- Flour is sold in 3-pound bags. How many pounds are in 7 bags?
- Five tickets to a play cost $38. What does each ticket cost if they all cost the same?
- One quart is equal to 32 ounces. How many quarts are in 128 ounces?



4-3: Learning Targets

- I can decide whether a division question is asking “how many groups?” or “how many in each group?”.
- I can create a diagram or write an equation that represents division and multiplication questions.

4-3-4: Rice and Beans

1. Here are three problems. Select **all** problems that can be solved using division.

   A. Jada cut 4 pieces of ribbon that were equal in length. She used a total of 5 feet of ribbon. How long, in feet, was each piece of ribbon she cut?

   B. A chef bought 3 bags of beans. Each bag contains $1\frac{2}{5}$ kilograms of beans. How many kilograms of beans did she buy?

   C. A printer takes $2\frac{1}{2}$ seconds to print a flyer. It took 75 seconds to print a batch of flyers without stopping. How many flyers were in the batch?

2. Andre poured 27 ounces of rice into 6 containers. If all containers have the same amount of rice, how many ounces are in each container?

   a. Write an equation to represent the situation. Use a "?" to represent the unknown quantity.

   b. Find the unknown quantity. Show your reasoning.