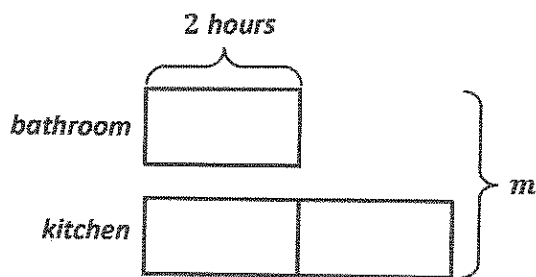


G4-M7-Lesson 4

Use RDW to solve the following problems.

1. Rebecca painted her bathroom in 2 hours. It took her twice as long to paint her kitchen. How many minutes did Rebecca spend painting her bathroom and kitchen?



I draw 1 unit of 2 hours to represent the amount of time Rebecca spends painting her bathroom. I draw 2 units of 2 hours to represent the amount of time she spends painting her kitchen.

1 unit: 2 hours

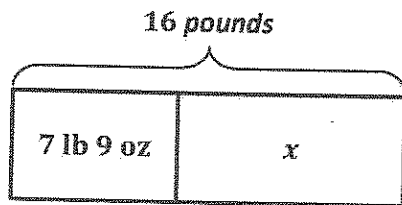
3 units: $3 \times 2 \text{ hours} = 6 \text{ hours}$

$m = 6 \times 60 \text{ minutes}$

$m = 360 \text{ minutes}$

Rebecca spent 360 minutes painting her bathroom and kitchen.

2. Mason's little sister weighed 7 pounds 9 ounces at birth. At her 6-month check-up, Mason's little sister weighed 16 pounds. How many ounces did Mason's little sister gain?



I draw a tape diagram to represent the problem. I know a part and the whole. I subtract to find the unknown part. Then, I convert 8 pounds to ounces and add 7 more ounces.

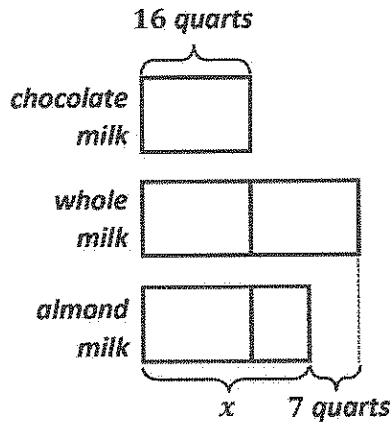
$$16 \text{ pounds} - 7 \text{ pounds } 9 \text{ ounces} = 8 \text{ pounds } 7 \text{ ounces}$$



$$x = 8 \text{ pounds } 7 \text{ ounces} = (8 \times 16 \text{ ounces}) + 7 \text{ ounces} = 128 \text{ ounces} + 7 \text{ ounces} = 135 \text{ ounces}$$

Mason's little sister gained 135 ounces.

3. Melissa stocks 16 quarts of chocolate milk in the refrigerated case at a grocery store. She puts twice as many quarts of whole milk as chocolate milk in the case. Melissa stocks 7 fewer quarts of almond milk than whole milk in the case.
- a. How many quarts of almond milk did Melissa stock in the refrigerated case?



The tape diagrams show the relationships among the different amounts of each type of milk Melissa stocked. The amount of whole milk is equal to 2 units of chocolate milk. The amount of almond milk is 7 quarts less than the whole milk.

1 unit: 16 quarts

2 units: $2 \times 16 \text{ quarts} = 32 \text{ quarts}$

$x = 32 \text{ quarts} - 7 \text{ quarts}$

$x = 25 \text{ quarts}$

Melissa stocked 25 quarts of almond milk.

I find the amount of whole milk by doubling the amount of chocolate milk. I find the amount of almond milk by subtracting 7 quarts from the amount of whole milk.

- b. Is the total number of quarts of chocolate milk, whole milk, and almond milk more than the 18 gallons of skim milk that are in the refrigerated case? Explain your answer.

$$16 \text{ quarts} + 32 \text{ quarts} + 25 \text{ quarts} = 73 \text{ quarts}$$

$$18 \text{ gallons} = 18 \times 4 \text{ quarts} = 72 \text{ quarts}$$

Yes, the total number of quarts of whole milk, chocolate milk, and almond milk is more than the 18 gallons of skim milk. 18 gallons is the same as 72 quarts, and the total for the other types of milk is 73 quarts. There is 1 fewer quart of skim milk than the other types of milk combined.