Lesson 2: Interpreting Division of a Whole Number by a Fraction—Visual Models

Classwork

**Example 1**

Question #\_\_\_\_\_\_\_

Write it as a division question.

Write it as a multiplication question.

Make a rough draft of a model to represent the question:

As you travel to each model, be sure to answer the following questions:

|  |  |  |  |
| --- | --- | --- | --- |
| Original Questions | Write the division question that was answered in each model. | What multiplication question could the model also answer? | Write the question given to each group as a multiplication question. |
| 1. How many miles are in miles? |  |  |  |
| 1. How many quarter hours are in hours? |  |  |  |
| 1. How many cups are in cups? |  |  |  |
| 1. How many pizzas are in pizzas? |  |  |  |
| 1. How many one-fifths are in wholes? |  |  |  |

**Example 2**

Molly uses cups of flour to bake bread. If this is of the total amount of flour she started with, what was the original amount of flour?

1. Create a model to represent what the question is asking.
2. Explain how you would determine the answer using the model.

Exercises 1–5

1. A construction company is setting up signs on miles of the road. If the company places a sign every of a mile, how many signs will it need?
2. George bought pizzas for a birthday party. If each person will eat of a pizza, how many people can George feed with pizzas?
3. The Lopez family adopted miles of trail on the Erie Canal. If each family member can clean upof a mile, how many family members are needed to clean the adopted section?
4. Margo is freezing cups of strawberries. If this is of the total strawberries that were picked, how many cups of strawberries did Margo pick?
5. Regina is chopping up wood. She has chopped logs so far. If the logs represent of all the logs that need to be chopped, how many logs need to be chopped in all?

Problem Set

Rewrite each problem as a multiplication question. Model your answer.

1. Nicole has used feet of ribbon. This represents of the total amount of ribbon she started with. How much ribbon did Nicole have at the start?
2. How many quarter hours are in hours?