

Lesson 6-1 • Group 2

Reinforce Understanding

6.1 Small Group • Group 2

I can use models to divide a whole number by a fraction and a fraction by a whole number, explain why the method works, and use it on a problem I have not seen before.

Worked model

An 11-foot ribbon is cut into pieces that are each $\frac{1}{6}$ foot long. How many pieces are there?

1. Write the whole number over 1. $11 \div \frac{1}{6} = 11/1 \div \frac{1}{6}$
2. Keep, Change, Flip. Keep $11/1$, change $\div$ to $\times$, flip the divisor: $6/1$
3. Multiply across. $11/1 \times 6/1 = 66/1$
4. Simplify. $66/1 = 66$ pieces

Answer: The ribbon makes 66 pieces that are each $\frac{1}{6}$ foot long.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Match each division expression to its quotient.

Write the letter of the matching item on each line.

1. _____ $5 \div \frac{1}{2}$
2. _____ $6 \div \frac{1}{3}$
3. _____ $2 \div \frac{1}{6}$
4. _____ $4 \div \frac{1}{4}$
5. _____ $3 \div \frac{1}{5}$
6. _____ $7 \div \frac{1}{2}$

- A10
- B18
- C12
- D16
- E15
- F14

2. How many $\frac{1}{6}$ -size pieces fit into 3 wholes?

Use the model to solve. Show your work.

Show your work

Answer: _____