

Lesson 6-1 • Group 1

Reinforce Understanding

6.1 Small Group • Group 1

With my small group, I can use models to divide a whole number by a fraction and a fraction by a whole number — one step at a time, with support.

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. What does $3 \div \frac{1}{4}$ mean?

Circle the letter of the best answer. Show how you know.

- A. How many $\frac{1}{4}$ -size pieces fit into 3
- B. $\frac{1}{4}$ of 3
- C. 3 groups of $\frac{1}{4}$
- D. 3 minus $\frac{1}{4}$

Show your work

2. Which expression means 'how many $\frac{1}{3}$ -size pieces are in 2'?

Circle the letter of the best answer. Show how you know.

- A. $\frac{1}{3} \div 2$
- B. $2 \div \frac{1}{3}$
- C. $2 \times \frac{1}{3}$
- D. $2 + \frac{1}{3}$

Show your work

3. Sort each statement: does dividing by the fraction give a result GREATER than the dividend, or LESS than the dividend?

Write the name of the correct group on each line.

Groups: Quotient GREATER Than Dividend Quotient LESS Than Dividend

- _____ $5 \div \frac{1}{3}$
- _____ $8 \div \frac{1}{2}$
- _____ $6 \div \frac{1}{4}$
- _____ $4 \div 2$
- _____ $10 \div 5$
- _____ $12 \div 3$