

Lesson 6-9

Reinforce Understanding

Divide Whole Numbers by Fractions

I can divide a whole number by a fraction by multiplying by the reciprocal.

Worked model

Agent Park has 4 pounds of powder and each bag holds $\frac{1}{2}$ pound. I want $4 \div \frac{1}{2}$.

1. Keep the 4. Change $\div$ to $\times$. Flip $\frac{1}{2}$ to make $\frac{2}{1}$, which is just 2.
2. Now I multiply: $4 \times 2 = 8$.
3. So $4 \div \frac{1}{2} = 8$. He can fill 8 bags. That makes sense: each pound fills 2 bags, and 4 pounds $\times 2 = 8$.

Practice

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

1. How many jumps of $\frac{1}{4}$ does it take to get from 0 to 2?

Mark and label each value on the number line.

Show your thinking

2. What is $6 \div \frac{1}{3}$?

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

- A. 2
- B. 3
- C. $\frac{6}{3}$
- D. 18

Show your work

3. What is $3 \div \frac{1}{5}$?

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

- A. $\frac{3}{5}$
- B. $\frac{5}{3}$
- C. 8
- D. 15

Show your work
