

Lesson 6-9 • Group 2

Reinforce Understanding

6.9 Small Group • Group 2

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

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. Complete the table: Whole Number $\div$ Fraction. Use Keep, Change, Flip.

Complete the table. Show how you found each value.

Expression	Rewrite as Multiplication	Quotient
$5 \div \frac{1}{4}$		
$8 \div \frac{1}{2}$		
$3 \div \frac{1}{6}$		
$7 \div \frac{1}{3}$		

Show your work

2. Match each division expression to its quotient.

Write the letter of the matching item on each line.

1. _____ $4 \div \frac{1}{3}$
2. _____ $7 \div \frac{1}{2}$
3. _____ $5 \div \frac{1}{6}$
4. _____ $2 \div \frac{1}{8}$
5. _____ $9 \div \frac{1}{4}$
6. _____ $6 \div \frac{1}{5}$

- A12
- B14
- C30
- D16
- E36
- F30