

Lesson 6-2 • Group 2

Reinforce Understanding**6.2 Small Group • Group 2**

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

Worked model

A pitcher holds $\frac{8}{9}$ liter of lemonade. Each glass takes $\frac{2}{9}$ liter. How many glasses can be filled?

1. Write the division. $\frac{8}{9} \div \frac{2}{9}$
2. Keep, Change, Flip. Keep $\frac{8}{9}$, change $\div$ to $\times$, flip the divisor to $\frac{9}{2}$
3. Multiply across. $\frac{8}{9} \times \frac{9}{2} = \frac{72}{18}$
4. Simplify. $\frac{72}{18} = 4$ glasses

Answer: The pitcher fills 4 glasses that each hold $\frac{2}{9}$ liter.

Practice

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

1. Divide each pair of fractions using Keep, Change, Flip.

Complete the table. Show how you found each value.

Problem	Keep, Change, Flip	Quotient
$\frac{1}{2} \div \frac{1}{6}$		
$\frac{3}{4} \div \frac{1}{4}$		
$\frac{2}{3} \div \frac{1}{3}$		
$\frac{5}{8} \div \frac{1}{4}$		

Show your work

2. Match each fraction division to its quotient.

Write the letter of the matching item on each line.

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

- A2
- B2
- C2 $\frac{1}{2}$
- D4
- E3 $\frac{1}{2}$
- F $\frac{2}{3}$