

Chapter 2	Fractions and Decimals
Date:	2.3 Dividing Mixed Numbers
Essential Question	How can you divide mixed numbers?

Composition Book

2.3 Dividing Mixed Numbers

1) Review $\frac{4}{9} \div \frac{3}{6}$

Step 1 Keep Change Flip $\frac{4}{9} \times \frac{6}{3}$

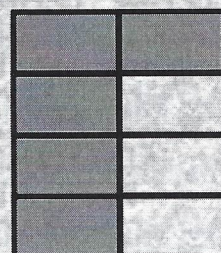
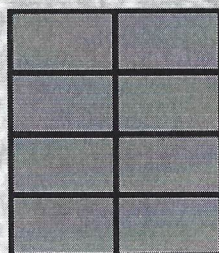
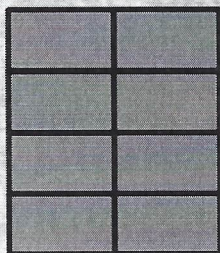
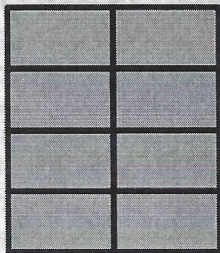
Step 2 Cross Cancel $3 \frac{4}{\cancel{9}} \times \frac{\cancel{6}^2}{3}$

Step 3 Multiply $3 \frac{4}{\cancel{9}} \times \frac{\cancel{6}^2}{3} = \frac{8}{9}$

2) Review Change the mixed number into an improper fraction.

$$3\frac{5}{8}$$

$$24 \swarrow \begin{matrix} 3 \\ \times 8 \\ \hline \end{matrix} + \frac{5}{8} \begin{matrix} 29 \\ \star \end{matrix} = \frac{29}{8}$$



Steps to
divide mixed
numbers

Look at your notes page.

1. Write each mixed number as an improper fraction.
2. Divide as you would with proper fractions. Remember to Keep, Change, Flip and then cross cancel.

Example

$$6\frac{4}{5} \div 2\frac{1}{8}$$

$$\frac{34}{5} \div \frac{17}{8}$$

$$2\frac{\cancel{34}}{5} \times \frac{8}{\cancel{17}_1} = \frac{16}{5} = 3\frac{1}{5}$$

Complete the next few problems in your composition book.
Divide a mixed number by a fraction.

3) $2\frac{1}{4} \div \frac{3}{8}$

1. Change to improper fraction $\frac{9}{4} \div \frac{3}{8}$

2. Keep - Change - Flip $\frac{9}{4} \div \frac{8}{3}$

3. Cross cancel $\frac{3}{1} \frac{\cancel{9}}{\cancel{4}} \times \frac{\cancel{8}}{\cancel{3}} \frac{2}{1}$

4. Solve $\frac{3}{1} \frac{\cancel{9}}{\cancel{4}} \times \frac{\cancel{8}}{\cancel{3}} \frac{2}{1} = \frac{6}{1} = 6$