

1/14/10

Objective:



TSWBAT estimate the quotient of mixed numbers and divide mixed numbers.

Estimating Quotients

$$59\frac{1}{2} \div 4\frac{3}{8}$$

1. Round each mixed number to the nearest whole number.

$$59\frac{1}{2} \approx 60 \quad 4\frac{3}{8} \approx 4$$

2. Divide.

$$60 \div 4 \quad \text{or} \quad 4 \overline{)60} \begin{array}{r} 15 \\ \hline \end{array}$$

$$\text{ANSWER} = 15$$

Practice:

Estimate each quotient.

$$\textcircled{1} \quad 7\frac{2}{5} \div 1\frac{3}{7}$$

$$\textcircled{2} \quad 14\frac{9}{16} \div 3\frac{8}{19}$$

$$\textcircled{3} \quad 100 \div 9\frac{2}{3}$$

Dividing Mixed Numbers

$$10\frac{1}{2} \div 1\frac{3}{4}$$

1. Write each mixed number as an improper fraction.

$$10\frac{1}{2} = \frac{21}{2} \quad 1\frac{3}{4} = \frac{7}{4}$$

2. Change the second fraction to its reciprocal.

$$\frac{21}{2} \times \frac{4}{7}$$

3. Multiply.

$$\frac{\overset{3}{\cancel{21}}}{\underset{1}{\cancel{2}}} \times \frac{\overset{4}{\cancel{4}}}{\underset{1}{\cancel{7}}} \rightarrow \frac{3}{1} \times \frac{2}{1} = \frac{6}{1}$$

4. Simplify

$$\frac{6}{1} = 6$$

Practice:

Find each quotient.

① $7 \div 1\frac{1}{6}$

② $6\frac{5}{6} \div 1\frac{1}{3}$

③ $8\frac{3}{4} \div 2\frac{1}{2}$

Practice

Estimate each quotient.

$$\textcircled{1} 50\frac{1}{4} \div 5\frac{3}{16}$$

$$\textcircled{2} 48\frac{8}{10} \div 7\frac{3}{7}$$

$$\textcircled{3} 99 \div 8\frac{2}{3}$$

Find the quotient

$$\textcircled{4} 2\frac{1}{2} \div 7$$

$$\textcircled{5} 4\frac{1}{6} \div \frac{15}{16}$$

$$\textcircled{6} 8\frac{2}{9} \div 4\frac{2}{3}$$



Homework:

Reteach 5-4

Please change number 4, 7 and 10 to the following problems.

$$\textcircled{4} \quad 5\frac{2}{3} \div 2\frac{2}{3} \quad \textcircled{7} \quad 12 \div 6\frac{1}{4}$$

$$\textcircled{10} \quad 6\frac{1}{6} \div 2\frac{1}{6}$$