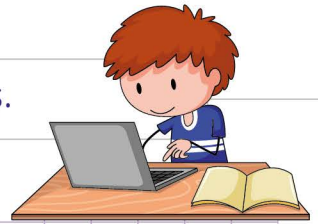


Name: Class:

Estimate quotients when dividing mixed numbers.



Estimate the quotients of the mixed numbers below. Which sign makes the statement true? ($>$, $<$, $=$).

1. $27 \frac{3}{4} \div 4 \frac{2}{9}$ 11

2. 25 $20 \frac{5}{9} \div 7$

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



Name: Class:

Estimate quotients when dividing mixed numbers.



Estimate the quotients of the mixed numbers below. Which sign makes the statement true? ($>$, $<$, $=$).

1. $27\frac{3}{4} \div 4\frac{2}{9}$ 11

turn each mixed number to the nearest whole number.

$$\begin{array}{r} 27\frac{3}{4} \div 4\frac{2}{9} \\ \downarrow \qquad \downarrow \\ 27.75 \div 4.222 \\ \downarrow \qquad \downarrow \\ 28 \div 4 \end{array}$$

divide the whole numbers (divide 28 by 4)

$$\frac{28}{4} = \frac{28 \div 4}{4 \div 4} = 7$$

Compare. The estimated quotient of $27\frac{3}{4} \div 4\frac{2}{9} = 7$
Since $7 < 11$

So, $27\frac{3}{4} \div 4\frac{2}{9}$ 11

2. 25 $20\frac{5}{9} \div 7$

$$\begin{array}{r} 20\frac{5}{9} \div 7 \\ \downarrow \qquad \downarrow \\ 20.55 \div 7 \\ \downarrow \qquad \downarrow \\ 21 \div 7 \end{array}$$

divide the whole numbers (divide 21 by 7)

$$\frac{21}{7} = \frac{21 \div 7}{7 \div 7} = 3$$

Compare. The estimated quotient of $20\frac{5}{9} \div 7 = 3$
Since $25 > 3$

So, 25 $20\frac{5}{9} \div 7$

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

$$\begin{array}{r} 3\frac{3}{4} \div 2\frac{1}{3} \\ \downarrow \qquad \downarrow \\ 3.75 \div 2.33 \\ \downarrow \qquad \downarrow \\ 4 \div 2 \end{array}$$

divide the whole numbers (divide 4 by 2)

$$\frac{4}{2} = \frac{4 \div 2}{2 \div 2} = 2$$

Compare. The estimated quotient of $3\frac{3}{4} \div 2\frac{1}{3} = 2$
Since $2 < 8$

So, $3\frac{3}{4} \div 2\frac{1}{3}$ 8

