

November 4, 2014

5th
6th

Starter
8 pts.

6, 7, 8 → 2
4, 5 → 1

① $\frac{-30.51}{-9}$

$$\begin{array}{r} 3.39 \\ 9 \overline{) 30.51} \\ \underline{-27} \\ 35 \\ \underline{-27} \\ 81 \\ \underline{-81} \\ 0 \end{array}$$

② $-0.6 \overline{) 5.244}$

$$\begin{array}{r} -8.74 \\ -0.6 \overline{) 5.244} \\ \underline{-48} \\ 44 \\ \underline{-42} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

③ $-0.05 \overline{) 4000}$

$$\begin{array}{r} -800. \\ -0.05 \overline{) 4000} \\ \underline{-40} \\ 0 \end{array}$$



1 1/4 Multiplying Rational Numbers - FRACTIONS!

Method 1:

Multiply then simplify...

$$\begin{aligned} & \frac{5}{6} \cdot \frac{9}{10} \\ & = \frac{45}{60} \div 5 \\ & = \frac{9}{12} \div 3 \\ & = \frac{3}{4} \end{aligned}$$

Method 2:

Simplify then multiply...

$$\begin{aligned} & \frac{5}{6} \cdot \frac{9}{10} \\ & = \frac{3}{2} \cdot \frac{3}{2} \\ & = \frac{3}{4} \end{aligned} \quad \begin{array}{l} \text{cross} \\ \text{cancel} \end{array}$$

Multiply each... use either method.

$$\frac{\cancel{2}^1}{3} \cdot \frac{1}{\cancel{4}_2}$$
$$= \frac{1}{6}$$

$$\frac{-4}{5} \cdot \frac{3}{5}$$
$$= -\frac{12}{25}$$

$$\frac{\cancel{-3}^{-1}}{4} \cdot \frac{-5}{\cancel{6}_2}$$
$$= \frac{5}{8}$$

$$\frac{2}{3} \cdot \frac{1}{4}$$
$$= \frac{2}{12}$$
$$= \frac{1}{6}$$

Multiply...

$$\frac{-4 \cdot \frac{2}{3}}{1}$$

$$= \frac{-8}{3}$$

$$= -2\frac{2}{3}$$

$$\begin{array}{r} 3 \overline{) 8} \\ \underline{-6} \\ 2 \end{array}$$


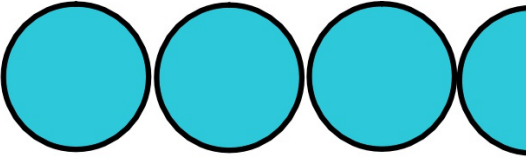

$$\frac{\frac{-9}{10} \cdot \frac{-12}{1}}{5}$$
$$= \frac{54}{5}$$
$$= 10\frac{4}{5}$$
$$\begin{array}{r} 10 \\ 5 \overline{) 54} \\ \underline{-5} \\ 04 \end{array}$$

Multiplying Mixed Numbers...

What is always the first step?

Mixed numbers need to be changed to improper fractions!!

Add


$$3\frac{1}{2} = \frac{7}{2}$$


Multiply

Get **MAD**

Multiply. Write answer in simplest form - ALWAYS!

$$\begin{aligned}
 & \frac{23}{9} \cdot -3\frac{5}{6} \cdot 4\frac{4}{5} \\
 & = -\frac{23}{\cancel{6 \div 6}} \cdot \frac{\cancel{24 \div 6}^4}{5} \\
 & = -\frac{92}{5} = -18\frac{2}{5}
 \end{aligned}$$

$$\begin{array}{r} 18 \\ 5 \overline{)92} \\ \underline{-5} \\ 42 \\ \underline{-40} \\ 2 \end{array}$$

$$\begin{aligned}
 & -2\frac{5}{8} \cdot -1\frac{5}{9} \\
 & = -\frac{\cancel{21}^{-7}}{\cancel{8}^4} \cdot -\frac{\cancel{14}^{-7}}{\cancel{9}^3} \\
 & = \frac{49}{12} = 4\frac{1}{12}
 \end{aligned}$$

$$\left(1\frac{1}{2}\right)\left(1\frac{1}{3}\right)\left(1\frac{5}{6}\right)$$

$$\begin{aligned}
 & = \frac{\cancel{2}^1}{\cancel{2}^1} \cdot \frac{\cancel{4}^2}{\cancel{3}^1} \cdot \frac{11}{\cancel{6}^3} \\
 & = \frac{11}{3} \\
 & = 3\frac{2}{3}
 \end{aligned}$$

$$\left(-2\frac{1}{4}\right)\left(3\frac{5}{9}\right)\left(-4\frac{1}{6}\right)$$

$$\begin{aligned}
 & = -\frac{\cancel{9}^{-1}}{\cancel{4}^1} \cdot \frac{\cancel{32}^4}{\cancel{9}^1} \cdot -\frac{25}{\cancel{6}^3} \\
 & = \frac{100}{3} \\
 & = 33\frac{1}{3}
 \end{aligned}$$

$$\begin{array}{r} 3 \\ 3 \overline{)100} \\ \underline{-90} \\ 100 \\ \underline{-90} \\ 100 \\ \underline{-90} \\ 100 \end{array}$$

Homework

White WS 10

Due Thursday