November 4, 2014

4th

Starter

7 pts

5, 6, 7 → 2
3, 4 → 1

① 430.2 ÷ −9

$$9\overline{)430.2} = -47.8$$

−36
70
−63
72
−72
0

② $0.4\overline{)9.16} = 22.9$

−8
11
−8
36
−36
0

③ $0.05\overline{)7} = 140.$

−5
20
−20
0

11/4 Multiplying Rational Numbers - FRACTIONS!

Method 1:

Multiply then simplify...

$$\frac{5}{6} \cdot \frac{9}{10}$$

$$= \frac{45}{60} \quad \begin{matrix} \div 5 \\ \div 5 \end{matrix}$$

$$= \frac{9}{12} \quad \begin{matrix} \div 3 \\ \div 3 \end{matrix}$$

$$= \frac{3}{4}$$

Method 2:

Simplify then multiply...

$$\frac{\overset{1}{\cancel{5}}}{\underset{2}{\cancel{6}}} \cdot \frac{\overset{3}{\cancel{9}}}{\underset{2}{\cancel{10}}}$$

Cross-cancel

$$= \frac{3}{4}$$

Multiply each... use either method.

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

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

$$\frac{-4}{5} \cdot \frac{3}{5}$$

since you can't cancel, just multiply across

$$= \frac{-12}{25}$$

$$\frac{-3}{4} \cdot \frac{-5}{6}$$

$$= \frac{5}{8}$$

$$\frac{2 \div 2}{12 \div 2} = \frac{1}{6}$$

$$\frac{15 \div 3}{24 \div 3} = \frac{5}{8}$$

Multiply...

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

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

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

$$\frac{-9}{10} \cdot {}^{-}12$$

$$= \frac{54}{5}$$

$$= 10\frac{4}{5}$$

Multiplying Mixed Numbers....

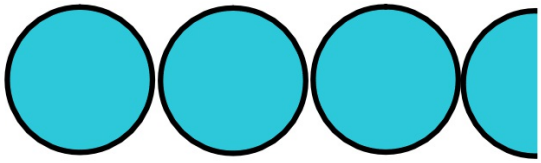
What is always the first step? $3\frac{1}{2} \div 1\frac{2}{3}$

Mixed numbers need to be changed to improper fractions!!

Add

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

Multiply



Multiply. Write answer in simplest form - ALWAYS!

$-3\frac{5}{6} \cdot 4\frac{4}{5}$

$= -\frac{23}{6} \cdot \frac{24}{5}$

$= -\frac{92}{5}$

$= -18\frac{2}{5}$

$-2\frac{5}{8} \cdot -1\frac{5}{9}$

$= \frac{-21 \div 3}{8 \div 2} \cdot \frac{-14 \div 2}{9 \div 3}$

$= \frac{49}{12} = 4\frac{1}{12}$

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

Cancel one # on the top with one # on the bottom

$= \frac{3}{2} \cdot \frac{4}{3} \cdot \frac{11}{6}$

$= \frac{11}{3}$

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

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

$= \frac{-9}{4} \cdot \frac{32}{9} \cdot \frac{-25}{6}$

$= \frac{100}{3}$

$= 33\frac{1}{3}$

Homework

White WS 10

Due Thursday