

10-24-17

Aim: SWBAT divide decimals with negatives.

HW: Pg. 267 # 3 - 22 (division problems)

Do Now: Quiz

Pg. 267 # 3-22

$$\textcircled{3} \quad 7.8 \cdot 2.6 = \textcircled{20.28} \quad \textcircled{4} \quad 3.75(-0.4) = \textcircled{-1.5}$$

$$\begin{array}{r} 7.8 \\ \times 2.6 \\ \hline 468 \\ + 156 \\ \hline 20.28 \end{array}$$

$$\begin{array}{r} 3.75 \\ \times 0.4 \\ \hline 1500 \\ + 000 \\ \hline 1.500 \end{array} \quad \begin{array}{l} \nearrow \\ \text{drop extra} \\ \text{zeros} \end{array}$$

$$\textcircled{5} \quad (-8.2)(0.7) = \textcircled{-5.74}$$

$$\begin{array}{r} 8.2 \\ \times 0.7 \\ \hline 574 \\ + 00 \\ \hline 5.74 \end{array}$$

$$\textcircled{7} \quad (25)(0.2) = \textcircled{5} \quad \textcircled{8} \quad (2.4)(0.3) = \textcircled{0.72}$$

$$\begin{array}{r} 25 \\ \times 0.2 \\ \hline 50 \\ + 00 \\ \hline 05.0 \end{array}$$

$$\begin{array}{r} 2.4 \\ \times 0.3 \\ \hline 72 \\ + 00 \\ \hline 0.72 \end{array}$$

$$\textcircled{10} \quad (13.65)(1.1) = \textcircled{15.015}$$

$$\begin{array}{r} 13.65 \\ \times 1.1 \\ \hline 1365 \\ + 1365 \\ \hline 15.015 \end{array}$$

15) $(5.41)(0.35) = 1.8935$

$$\begin{array}{r} \overset{2}{5}.41 \\ \times 0.35 \\ \hline 2705 \\ 1623 \\ + 000 \\ \hline 1.8935 \end{array}$$

18) $(-2.687)(-9) = 24.183$

$$\begin{array}{r} \overset{6}{2}.\overset{6}{6}\overset{6}{8}7 \\ \times 9 \\ \hline 24.183 \end{array}$$

20) $(0.098)(-0.55) = -0.0539$

$$\begin{array}{r} 0.\overset{4}{0}\overset{4}{9}8 \\ \times 0.55 \\ \hline 0490 \\ 0490 \\ + 000 \\ \hline .05390 \end{array}$$

Drop extra zero

21) $(6.025)(48.2) = 290.405$

$$\begin{array}{r} \overset{4}{6}.\overset{4}{0}\overset{4}{2}5 \\ \times 48.2 \\ \hline 12050 \\ 48200 \\ + 24100 \\ \hline 2904050 \end{array}$$

Drop extra zero

Dividing Decimals

- Move the decimal point on the outside number (divisor) until it's at the end.
- Move the decimal point on the inside (dividend) the same number of places.
- Bring the decimal point up into the quotient.
- Complete long division.

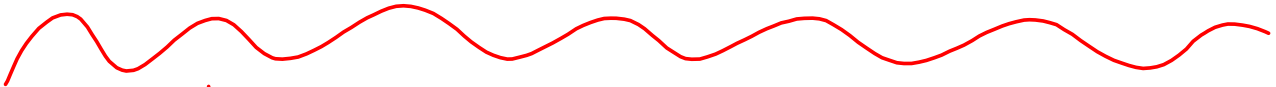
Fraction \rightarrow Decimal

$$\frac{2}{5} = 0.4$$

$$\begin{array}{r} 0.4 \\ 5 \overline{) 2.0} \\ \underline{-20} \\ 0 \end{array}$$

terminating decimals $\frac{4}{8} = 0.5$

$$\begin{array}{r} 0.5 \\ 8 \overline{) 4.0} \\ \underline{-40} \\ 0 \end{array}$$



$$\frac{1}{3}$$

$$\begin{array}{r} 0.33 \\ 3 \overline{) 1.00} \\ \underline{-9} \\ 10 \end{array}$$

Repeating
Decimal

$$\begin{array}{l} 0.3 \quad \times \\ \textcircled{0.\overline{3}} \\ 0.\overline{33} \quad \times \\ 0.33\overline{3} \quad \times \end{array} \quad \frac{3}{10}$$

Find the quotient.

$$1.6 \div 0.04 = 40$$

$$-13 \div (-0.65) = +20$$



$$0.04 \overline{) 1.60}$$

$$\begin{array}{r} 40. \\ 4 \overline{) 160.} \\ \underline{-16} \\ 00 \\ \underline{-00} \\ 0 \end{array}$$

$$0.65 \overline{) 13.00}$$

$$\begin{array}{r} 20. \\ 65 \overline{) 1300.} \\ \underline{-130} \\ 00 \\ \underline{-00} \\ 0 \end{array}$$

$$-4.635 \div (-4.5) = +1.03$$

$$\begin{array}{r} 4.5 \overline{) 4.635} \\ 45 \overline{) 46.35} \\ \underline{-45} \\ 13 \\ \underline{-00} \\ 135 \\ \underline{-135} \\ 0 \end{array}$$