Review II

March-09-14 9:13 AM

Do every 3rd question! :)

Name:_____ Date:_____

Section 3.5 Dividing Rational Numbers

1. Multiply the following. Keep your answers as a fraction in simplest form. No calculators:

a) $\frac{3}{4} \div \frac{9}{12}$ $\frac{\cancel{3}^{1}}{\cancel{4}_{1}} \times \frac{\cancel{12}^{3}}{\cancel{9}_{3}} = 1$	b) $\frac{3}{7} \div \frac{21}{14}$	c) $\frac{18}{13} \div \frac{27}{39}$	d) $\frac{21}{8} \div 1\frac{3}{4}$ $\frac{3}{2}$
e) $\frac{32}{22} \div \frac{16}{33}$	f) $\frac{24}{15} \div \left(-1\frac{3}{5}\right)$	g) $\frac{24}{55} \div \frac{36}{25} \div \frac{35}{81}$ $\frac{54}{77}$	h) $2\frac{8}{21} \div \frac{70}{27} \div 2\frac{6}{27}$
i) $2.25 \div 1.25$	j) $2\frac{2}{3} \div 0.\overline{888}$ $2\frac{2}{3} \div \frac{8}{9}$ $= 3$	k) $0.3 \div 0.\overline{555}$	L) $1.\overline{66} \div 0.\overline{25}$
m) $3.20 \div -0.4$ $\frac{3.20}{-0.4} \frac{\times 10}{\times 10} = \frac{32}{-4}$ $= -8$	n) $-12.80 \div 0.4$	o) $0.75 \div 0.875$	p) $0.021 \div -0.03$ $\frac{0.021}{-0.03} \times \frac{1000}{1000}$ $= \frac{21}{-30} = -0.7$
q) $0.8 \div (-0.4) \div (0.75)$	r) $\frac{12}{25} \div \frac{42}{125} \div \frac{-15}{48}$ $\frac{\cancel{12}^{2}}{\cancel{25}_{1}} \times \frac{\cancel{125}^{5}}{\cancel{42}_{7}} \times \frac{\cancel{48}^{16}}{\cancel{-15}_{-5}}$ $-\frac{32}{7}$	s) $0.875 \div 0.75 \div 0.8$	t) $0.\overline{25} \div 8.\overline{33} \div 0.6$

2. Determine the missing number in the box so that the expression will be true:

a) $\frac{2}{4} \div \boxed{\frac{5}{8}} = \frac{4}{5}$	b) $0.4 \div \square = 1.\overline{333}$ $= 1\frac{3}{9} = \frac{12}{9}$ $\frac{3}{10}$	c) $1.25 \div \square = 1.\overline{666}$ $\rightarrow 1.6\overline{6}$ $\frac{3}{4}$
d) $-1.26 \div \square = 0.2$ $-\frac{63}{10}$	e) $-1.4 \div \square = 1.\overline{777}$ Skip!	f) $\square \div 1.2 = 2.25$ $\frac{27}{10}$

3. Jason has 14.70 in his wallet. He wants to buy candies that cost \$0.35 each. How many can he purchase?

Skip for now!

4. A plant grew $1.25 inches$ every day. How many days will it require the plant to grow 36.5 inches?

Skip for now!

5. David owns 40 shares of Apple stocks and the value dropped \$2250.25. What was the drop of each share?

Skip for now!

6. At 9pm, the temperature was $14.6°$ and at 3am, the temperature was $-5.3°$. What was the mean change in temperature? (ie: change in temperature each hour)

Skip for now!

7. Evaluate without a calculator: $\left(\frac{1.\overline{428571} \div 1.4}{0.\overline{777} \times 0.\overline{333}}\right)^2$

Skip for now!

