Math 60, Section 1.2 and 1.4 Activity   Name:_____

Section 1.2: Fraction Review

1. Multiply the fractions - Try to cross-cancel first. Always simplify!

a. $\dfrac{3}{5} \cdot \dfrac{7}{6}$

b. $-5\dfrac{1}{2} \cdot \dfrac{4}{3}$

c. $\left(-\dfrac{3}{8}\right)\cdot\left(-\dfrac{2}{9}\right)$

d. $-3\cdot\dfrac{1}{6}$

e. $\left(\dfrac{3}{5}\right)^{2}$

f. $\dfrac{2}{3} \cdot \dfrac{5}{4} \cdot \dfrac{9}{10}$

2. Divide the fractions. Always simplify!

a. $-1 \div \dfrac{1}{4}$

b. $-\dfrac{1}{7} \div \left(-\dfrac{5}{6}\right)$

c. $\dfrac{9}{2} \div \left(-\dfrac{1}{3}\right)$

d. $-\dfrac{3}{8} \div \dfrac{9}{4}$

3. Add or Subtract the fractions. Always simplify!

a. $\dfrac{1}{7} + \dfrac{1}{14}$

b. $\dfrac{3}{4} - \dfrac{4}{5}$

c. $-\dfrac{1}{3} - \left(-\dfrac{4}{5}\right)$

d. $\dfrac{1}{2} - \dfrac{5}{9}$

e. $-2 + \dfrac{5}{7}$

f. $\dfrac{3}{4} + \dfrac{1}{6} - \dfrac{7}{3}$

4. Perimeter and Area – Draw a Picture.

A rectangular yard is $\dfrac{1}{8}$ of a mile wide by $\dfrac{1}{3}$ mile long. How long is the perimeter? How long is the area? Write your answer in a complete sentence, including units.

Section 1.4: Order of Operations

5. Evaluate each expression using the order of operations. Show each step using proper form.

a. $10+7[5-6\div3]$

b. $7-3\left[4-(-3)^2\right]$

c. $3(1-2|3-6|)$

d. $\dfrac{22+20\div(-5)}{(-4+7)^2}$

e. $4(-9)+8\div(-2)-6\cdot5$

f. $3-\sqrt{7(4)+8}$

6. More Practice

a. $\dfrac{2}{3} + \dfrac{3}{4}$

b. $\dfrac{2}{3} - \dfrac{3}{4}$

c. $\dfrac{2}{3} \cdot \dfrac{3}{4}$

d. $\dfrac{2}{3} \div \dfrac{3}{4}$

e. $-\dfrac{1}{6} - \dfrac{3}{12}$

f. $\left(\dfrac{2}{3}\right)^{2}$

g. $-\dfrac{7}{8} \div \dfrac{1}{4}$

h. $\dfrac{9}{16} \cdot \dfrac{4}{3} \cdot \dfrac{2}{5}$

i. $\dfrac{1}{2} - \dfrac{3}{4} + \dfrac{5}{8}$

j. $-2\dfrac{3}{8} + \dfrac{11}{6}$

k. $-6 \cdot \left(\dfrac{1}{3}\right)$

l. $1\dfrac{1}{2} \div (-3)$

m. $\dfrac{2^2 - 5^2}{(2-5)^2}$

n. $-6^2 - 27 \div 3^2 \cdot 2 - (-1)$

o. Jess walked $\dfrac{7}{10}$ of a mile in the morning and $\dfrac{3}{4}$ of a mile in the afternoon. How far did they walk altogether? Show all your steps and write your answer in a complete sentence.

p. Carlos is making Polvorones, which are Mexican Wedding Cookies. The recipe calls for $1\dfrac{1}{4}$ cups of butter and he is making five times the recipe. How much butter does he need?