

## Homework Week 1 (Q2)

### Tuesday 10/31 – Must show work for credit

- 1)  $-86 + 76 - (-83)$
  
- 2) The XYZ Company has earned a total profit of  $-\$1,312.50$  since it was founded 2.5 years ago. Write and evaluate an expression to show the average annual profit for the XYZ Company. What does the sign of the quotient indicate about the company's profits?
  
- 3) Unit Rate: A value per \_\_\_\_\_ of something. Complex Fraction is a fraction in which the \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ are fractions. So it is like a fraction in a fraction. To simplify a complex fraction you \_\_\_\_\_ the numerator by the denominator.
  
- 4) Solve for x:  $\frac{3}{7} = \frac{x}{25}$
  
- 5) Select ALL of the following that are equivalent to  $\frac{-9}{8}$   
a.  $\frac{9}{-8}$       b.  $\frac{-18}{-16}$       c.  $-1\frac{1}{8}$       d.  $\frac{-18}{16}$       e.  $-2\frac{1}{8}$       f.  $\frac{-9}{-8}$       g.  $\frac{18}{-16}$
  
- 6) Select ALL of the following that are equivalent to  $a - b$   
a.  $a + (-b)$       b.  $a - (-b)$       c.  $b - (-a)$       d.  $a + b$       e.  $-b + a$       f.  $b - a$       g.  $b + a$

**Wednesday 11/1 – Must show work for credit**

1)  $-3\frac{4}{5} - 6\frac{3}{10} - (-2\frac{1}{5}) - 4\frac{1}{10}$

2) Mrs. Kutty has  $2\frac{3}{4}$  acres of farmland. She will plant corn on  $\frac{1}{4}$  of this land, potatoes on  $\frac{1}{12}$  of the land, wheat on  $\frac{5}{8}$  of this land and beans on the rest of the land. Find the number of acres Mrs. Kutty will plant of each crop.

- a. \_\_\_\_\_ acres of corn
- b. \_\_\_\_\_ acres of wheat
- c. \_\_\_\_\_ acres of potatoes
- d. \_\_\_\_\_ acres of beans

3) Which speeds equal to  $\frac{1}{2}$  mile per hour? Circle all that apply. (Simplify each of them)

- a.  $\frac{\frac{5}{6}mi}{\frac{5}{12}hr}$
- b.  $\frac{\frac{1}{4}mi}{\frac{1}{2}hr}$
- c.  $\frac{\frac{1}{10}mi}{\frac{1}{5}hr}$
- d.  $\frac{\frac{3}{8}mi}{\frac{3}{4}hr}$
- e.  $\frac{\frac{2}{3}mi}{\frac{1}{3}hr}$
- f.  $\frac{\frac{4}{5}mi}{\frac{4}{10}hr}$

4) Solve for x:  $\frac{x}{11} = \frac{7}{30}$

5) Select ALL of the following that are equivalent to  $-\frac{5}{2}$

- a.  $\frac{-5}{2}$
- b.  $\frac{-10}{-4}$
- c.  $-\frac{2}{5}$
- d.  $\frac{-5}{-2}$
- e.  $-2\frac{1}{2}$
- f.  $\frac{5}{-2}$
- g.  $\frac{10}{-4}$

6) Select ALL of the following that are equivalent to  $r - s$

- a.  $r - (-s)$
- b.  $-r + s$
- c.  $r + (-s)$
- d.  $-r + s$
- e.  $s - (-r)$
- f.  $s - r$
- g.  $-s + r$

**Thursday 11/2 – Must show work for credit**

- 1)  $-1.6 + (-5.81) + 1.1 + 0.5 + (-3.22)$
- 2) Ben needs  $1\frac{3}{8}$  feet of fabric to make one banner. How many banners can he make from  $4\frac{1}{2}$  yards of fabric?
- 3) A rotating object makes  $\frac{5}{6}$  of a revolution in  $\frac{7}{10}$  of a second. Find the approximate speed in revolutions per second. Convert your answer to a decimal and round to the hundredths place.
- 4) Solve for x:  $\frac{18}{x} = \frac{9}{25}$
- 5) Select ALL of the following that are equivalent to  $-1\frac{1}{3}$ 
  - a.  $\frac{-4}{3}$
  - b.  $\frac{-3}{4}$
  - c.  $\frac{-8}{6}$
  - d.  $\frac{4}{-3}$
  - e.  $-1\frac{2}{9}$
  - f.  $\frac{8}{-6}$
  - g.  $\frac{-8}{-6}$

Select ALL of the following that are equivalent to  $g - h$

- a.  $h + g$
- b.  $-g + h$
- c.  $g + (-h)$
- d.  $-h + g$
- e.  $h - g$
- f.  $g - (-h)$
- g.  $g + h$