Pre-Algebra Problem Set 5   **First Name**_____ **Last**_____

Assigned Thursday 10/3, due Friday 10/11

NO Work Shown, NO Credit Given   **Period**_____

Problem #1-#4 can be completed on this paper. The work for problems #5-14 needs to be attached on a *separate piece of paper*.

1. Find a value for x that will make each of the following equations true.

   a) $x + 8 = 21$ **b)** $x - 32 = 55$ **c)** $3x = 54$ **d)** $\frac{x}{5} = 10$

2. Locate the coordinates of the three highlighted points on the graph of the triangle below and write them as ordered pairs (x, y).

3. Multiple Choice: If the probability of getting a particular result in an experiment is 75.3%, what is the probability of *not* getting that result?   **A)** 75.3% + 100%

   B) 75.3% − 100%

   C) 100% − 75.3%

   D) $\dfrac{1}{75.3\%}$
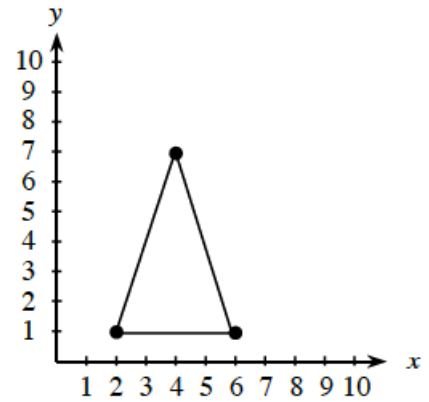
4. Order these numbers from least to greatest:

   $\dfrac{1}{2}$ 1.1 $\dfrac{5}{3}$ 2   0   0.4   −2 $\dfrac{5}{8}$

Please show your work for #5-14 on a separate piece of paper, and <u>staple</u> to this homework.

**5.** Maggie is making muffins with a recipe that yields 18 muffins.

a) There are 12 people in Maggie's book club. If the muffins are divided evenly among each person, how much will each person get? *Explain* your thinking.

b) If Maggie wanted to divide the muffins evenly between the 36 students in her class, how much muffin would each person get? *Explain* your thinking.

6. What is the probability of getting either blue *or* green on a spinner that is $\frac{3}{10}$ green and $\frac{1}{5}$ blue? Show your work.

7. For each figure below, find the area <u>and</u> the perimeter. Label each answer, so I know which is which.

a)

16 cm
10 cm / 9 cm / 10 cm
16 cm

b)

5 in.   4 in.   9.05 in.
11 in.

c)

25 m
21 m   20 m   24 m
44.67 m
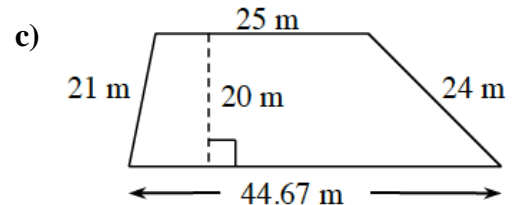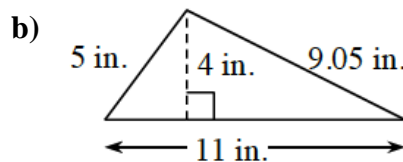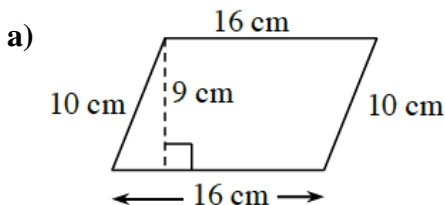
8. a) If you were to spin the spinner to the right, what would be the probability of landing on green or purple? Explain how you know.
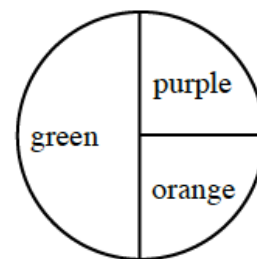
b) If you were to spin the spinner above 60 times, how many times would you expect it to land on orange? Explain how you know.

9. Jonathan measured 2 cups of flour into a bowl on the counter. Then he spilled part of it, and now there is only $\frac{3}{8}$ cup left. How much did he spill?

10. A recipe calls for 2 cups of flour and 3 eggs and it serves 8 people. If we need to serve 48 people, how much flour and how many eggs should we use? Why?

11. Find each sum or difference.

a) $\frac{4}{5} + \frac{3}{4}$ **b)** $\frac{6}{7} - \frac{2}{5}$ **c)** $\frac{5}{6} + \frac{3}{8}$ **d)** $\frac{5}{9} - \frac{1}{3}$

12. Linh said, "The opposite of 5 is -5. The opposite of $\frac{2}{3}$ is $-\frac{2}{3}$. I think the opposite of a number is always negative." Do you agree or disagree with Linh? Why?

13. A rectangular park is 150 yards on one side and 125 yards on the other.
a) If Mrs. Bell walks around the park two times, how far does she walk? Sketch a figure and show your work.
b) If Mrs. Bell wanted to walk 6050 yards, how many times would she have to walk around the park?

14. Draw an example of each of the following shapes.

    a. parallelogram   **b.** obtuse triangle   **c.** right triangle

    d. trapezoid   **e.** scalene triangle   **f.** right trapezoid