Math 8CP Homework   Name _____
October 22-24, 2018   Per _____ Date _____

Monday
1. Using the digits **1 to 9**, at most **one time each**, fill in the blanks to make two different pairs of fractions that have a product of 2/3. Hint: think of fractions that are equivalent to 2/3.
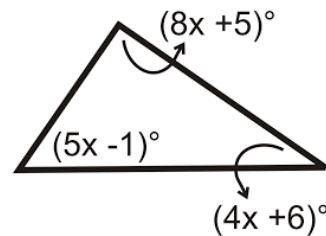
$$\frac{\square}{\square} \bullet \frac{\square}{\square} = \frac{2}{3}$$

$$\frac{\square}{\square} \bullet \frac{\square}{\square} = \frac{2}{3}$$

2. Your mom gave you $55 to start a savings account. You save $60 each month so you can buy a new laptop. If the laptop costs $750 in how many months will you have enough money saved to buy it? Write an equation and solve it. Tell what your variable in the equation represents.
Let x =_____

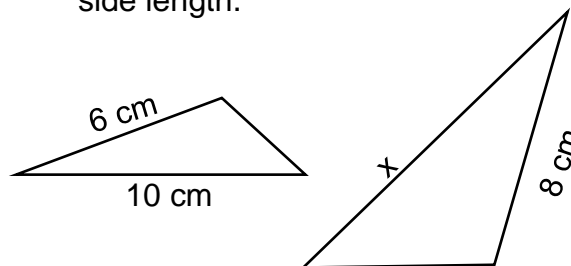**3.** Find the value of x and then find the measure of each angle of the triangle.

$(8x +5)°$

$(5x -1)°$

$(4x +6)°$

4. Reflect the figure over the *y*-axis then translate
     (x, y) ⟶ (x + 3, y + 4)
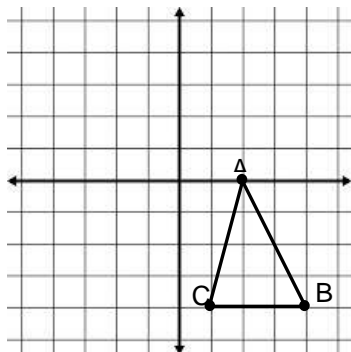
2nd Image Coordinates:
A": (,   ) B": (,   ) C": (,   )

5. The triangles are similar. Find the missing side length.

6 cm

10 cm

x

8 cm

_____

Tuesday:
1. Simplify the expressions:
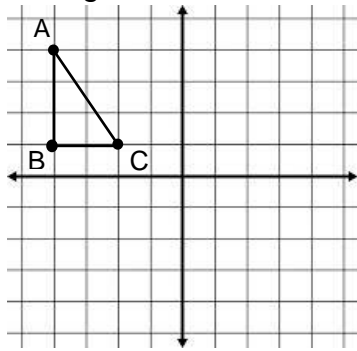a. $-3x^2 + 4y - x^2 + 7xy - 6y + 18 - xy$ b. $-(3x - 5y) + 3(-2x - 3y)$

2. Solve:
a. $3x + 4 = \frac{1}{2}(4x + 20)$ b. $5x + 3x + 4 = 4x - 3 + 4x$

3. Rotate the image 180° then reflect over x-axis,

2nd Image Coordinates:

A'': (,   ) B'': (,   ) C'': (,   )

4. Using the digits 1 to 9, one time each, fill in the blanks to make a difference that is as close to 329 as possible.

___ ___ ___ − ___ ___ ___ = ___ ___ ___

How close did you get??

5. Solve:

a. $\dfrac{x}{6} - 7 = -5$

b. $2x + 9 - 4x = -(2x - 3) - 4$

Wednesday:

1. Find the circumference and area of a circle with a radius of 16 cm. Round to 2 decimal places:
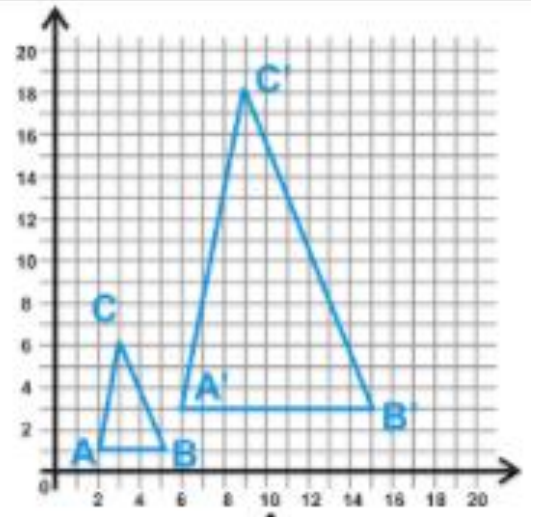
Circumference:_____   Area:_____

2. What is the scale factor of the dilation?
Give an example of how you know.

Draw the triangle that dilates the original figure by a scale factor of 2.5 and write the second image coordinates below:
A'': (,   ) B'': (,   ) C'': (,   )

3. a. $11\dfrac{1}{4} - 5\dfrac{1}{2}$ b. $1\dfrac{3}{4} \cdot 2\dfrac{1}{6}$

4. A gym charges a registration fee of $125 and then it costs $45 per month. How many months can you join if you have $1000? Write what the variable in your equation represents, write an equation and solve it.

Let x = _____
Equation: _____
Solution: _____

5. Draw 2 parallel lines with a transversal. Number your angles 1 through 8.
Name a pair of the following angles:
a. vertical _____   b. corresponding_____

c. alternate interior _____

d. supplementary _____.