Geometry:  1ˢᵗ Semester Problem Set #2                              Name:_____
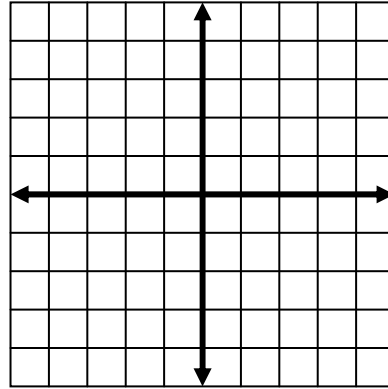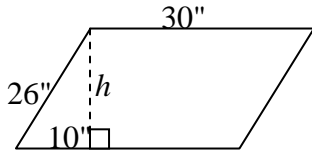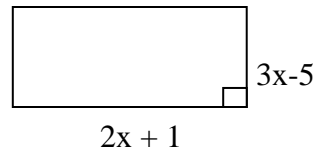
1.   Given the points  $A(5,-4)$  and  $B(-2,1)$

         Find *AB* (find the distance between
         the points.) Round to nearest tenth.

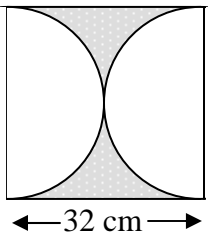2.   Find h, then find the area of
     this parallelogram.

         30"

    26/   $h$
         10'⌐

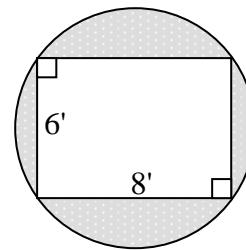3.   Find the area and perimeter
     of the rectangle in terms of *x*.

         3x-5

         2x + 1

**Find the area of the shaded region.( Pictures are not drawn to scale.) Round to nearest tenth, if necessary.**

4.

         ←―32 cm―→

5.

         6'

         8'

6.   A certain bicycle tire travels 500" in 5 revolutions. Round to nearest tenth, if necessary.
     a.  How far does the tire go in one revolution?

     b.  What is the radius of the tire?

7. If the circumference of a circle is 438 inches, what is the diameter? Round to the nearest tenth.
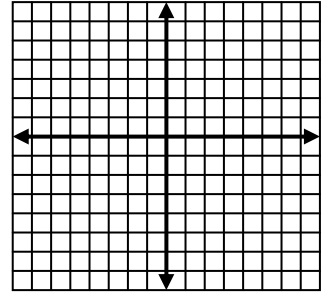
8. Graph these four lines **and** <u>find the area of the enclosed shape.</u>

$$y = 3$$
$$y = x - 2$$
$$y = -2$$
$$x = -3$$

9. If the diagonal of a rectangle is 25 cm, and the length is 24 cm, what is the width of the rectangle? Round to nearest tenth, if necessary.

10. If the area of a circle is 500 cm$^2$, what is the diameter? (Use calculator $\pi$, and round to the nearest tenth.)

**<u>Use the quadratic formula to solve the following equations. Round to the nearest tenth.</u>**

11. $x^2 - 7x - 4 = 0$

12. $3x^2 + 10x + 5 = 0$

**<u>Multiply the following binomials.</u>**

13. $(2x + 3)(4x - 7)$

14. $(x - 5)(5x - 9)$