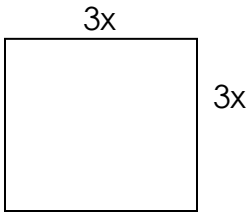
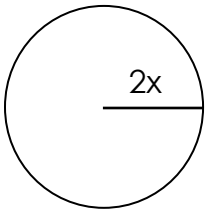
5-4 Notes – Area & Perimeter Name _____
NC Math 1

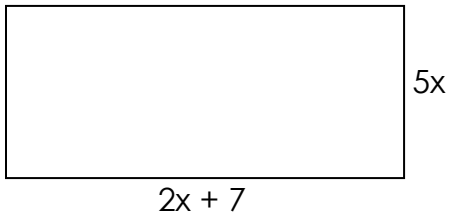
Simplify

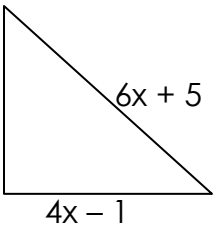
1. $(2x + 7)(3x^2 - 7x + 9)$ 2. $(6x^2 - 3x + 9)(4x^2 + 5x - 1)$

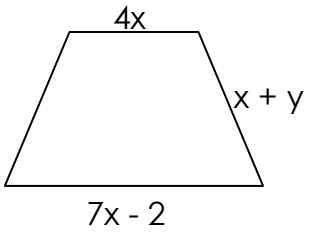
I. Perimeter

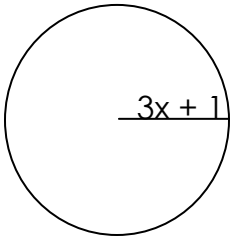
1. 

2. 

3. 

4. 

5. 

6. 

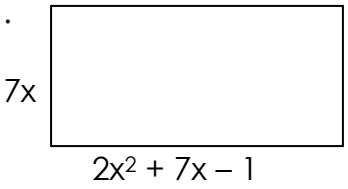
II. Area

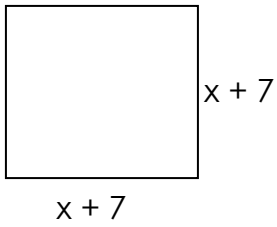
A. Formulas

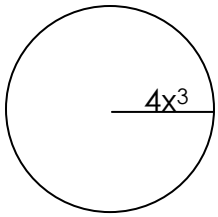
Rectangle: _____ Square: _____ Triangle: _____

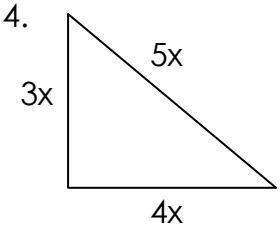
Trapezoid: _____ Circle: _____

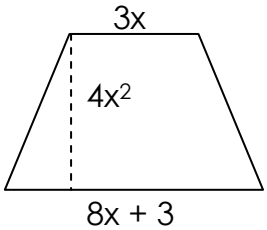
B. Find the area of the following.

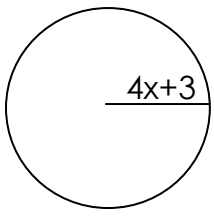
1. 

2. 

3. 

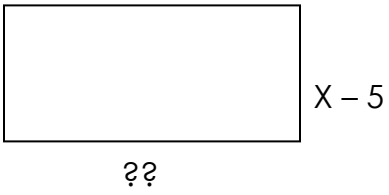
4. 

5. 

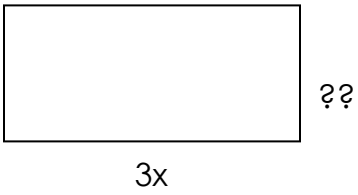
6. 

C. Find the missing side using the information given.

1. $P = 16x - 4$



2. $A = 3x^2 + 6x$

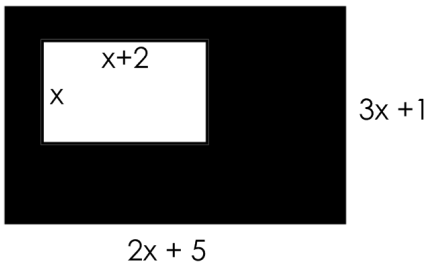


III. Word Problems

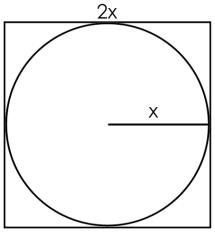
1. Jake has a rectangular vegetable garden that is x + 8 ft long and 2x- 4 ft wide.
   a. How much fencing does Jake need to completely enclose his garden?

   b. Find the area of Jake's garden.

2. Find the area of the shaded region.



3. You are painting a rectangular wall with length $5x^2$ and width 12x. There is a rectangular door that measures x by 2x that will not be painted. What is the area of the wall that is to be painted?

4. A flat, square roof needs a square patch in the corner to seal a leak. The side length of the roof is (x +12) and the side length of the patch is x. What is area of the good part of the roof that doesn't need to be patched?

5. A helicopter landing pad is sometimes marked with a circle inside a square so that is it visible from the air. What is the area of the shaded region of the helipad?