Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Ratios of Similarity Review for Quiz** 3/6/13

1. If all the **side lengths** in a figure multiply by 7, then the **perimeter** will multiply by \_\_\_\_\_\_\_\_ and the **area** will multiply by \_\_\_\_\_\_\_\_.
2. If the **area** of one circle is 25 times more than the other, the **diameter** of the larger circle is \_\_\_\_\_\_\_\_ times longer than the other, and the **radius** of the larger circle is \_\_\_\_\_\_\_\_ times longer than the other.
3. The **perimeter** of Triangle 1 is 30 and the **perimeter** of similar Triangle 2 is 40.  
   If a **side length** of Triangle 1 is 9, then its corresponding side in Triangle 2 is \_\_\_\_\_\_\_\_(x).  
   If the **area** of Triangle 1 is 90, then the area of Triangle 2 is \_\_\_\_\_\_\_\_(y).  
     
   Ratio of Sides & Perimeters: Proportion to solve for x:  
     
   Ratio of Area: Proportion to solve for y:
4. The area of Triangle 1 is 250 and the **area** of Triangle 2 is 360.  
   If the **perimeter** of Triangle 1 is 50, then the **perimeter** of Triangle 2 is \_\_\_\_\_\_\_\_(x).

If a **side length** in Triangle 2 is 12, then its corresponding **side length** in Triangle 1 is \_\_\_\_\_\_\_\_(y).  
  
Ratio of Sides & Perimeters: Proportion to solve for x:  
  
Ratio of Area: Proportion to solve for y:

1. The **area** of a rectangle is 100 times larger than a similar rectangle.  
   If a **side length** in the smaller rectangle is 4, then its corresponding **side** in the larger rectangle is \_\_\_\_\_\_\_\_(x).  
   If the **perimeter** in the larger rectangle is 7, then the **perimeter** of the smaller rectangle is \_\_\_\_\_\_\_\_(y).  
     
   Ratio of Sides & Perimeters: Proportion to solve for x:  
     
   Ratio of Area: Proportion to solve for y:
2. A circle with radius x has an area of 30 cm2.  
   A circle with radius 2x then must have an area of \_\_\_\_\_\_\_\_.  
   A circle with radius 3x then must have an area of \_\_\_\_\_\_\_\_.

The following classwork will **not** be on Thursday’s Quiz:

1. Find the area of the shaded region: 8. Find the area of the shaded region:

Area = Area =