11.3 Perimeter and Area of Similar Figures

**Areas of Similar Polygons**

If two polygons are similar with ______ in ______ of _____, then the ______ are in ratio of _____.

The perimeter of ΔABC is 16 ft, and its area is 64 ft². The perimeter of ΔDEF is 12 ft. Given that ΔABC ~ ΔDEF, find the ratio of the area of ΔABC to the area of ΔDEF.

Find the area of ΔDEF.

The ratio of the areas of two regular decagons is 20:36. What is the ratio of their corresponding side lengths in simplest radical form?
Rectangles I and II are similar. The perimeter of Rectangle I is 66 inches. Rectangle II is 35 feet long and 20 feet wide. Show the steps you would use to find the ratio of the areas and then find the area of Rectangle I.

Assignment: 740 #2-28 even, 35-41 = 21
Extra Credit: 743 #2, 4 = +2