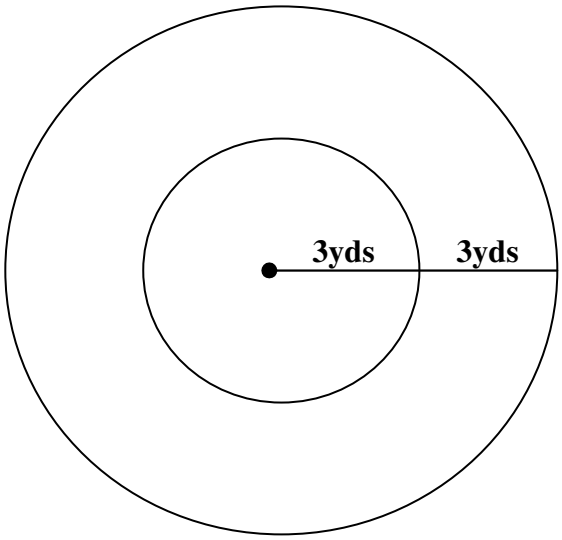
Notes for 11-7: Ratios of Perimeters and Areas

The diagram to the right is a representation of the bus macadam in front of the school.



Find the circumferences of the small circle and big circle.
Small = Big =

What is the ratio of small : big (make sure you reduce the ratio)

Find the areas of the small circle and big circle.
Small = Big =

What is the ratio of small : big (make sure you reduce the ratio)

Comparing areas of triangles:

1. If two triangles have equal heights, then the ratio of their areas = the ratio of their bases.

2. If two triangles have equal bases, then the ratio of their areas = the ratio of their heights.

3. If two triangles are similar, then the ratio of their areas equals the square of their scale factor.

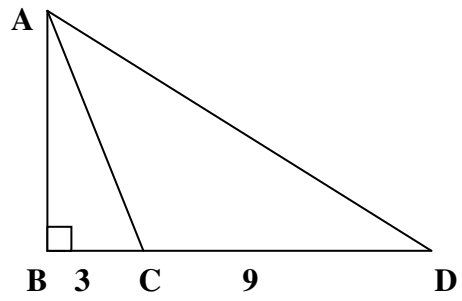
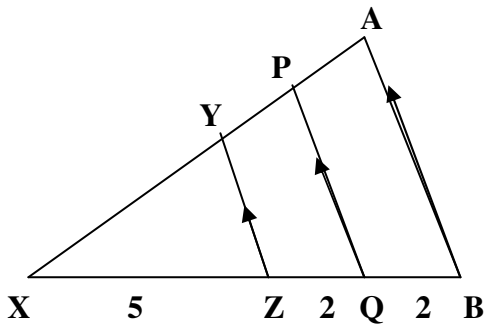
Ex 1.

Complete the following table.

Scale Factor	**3: 4**		
Ratio of Perimeters		**8: 7**	
Ratio of Areas			**4: 9**

Ex 2.

Find the ratios of the areas of the following.

a. ΔABD to ΔADC b. ΔABC to ΔABD	
a. ΔXYZ to ΔXPQ b. ΔXAB to ΔXYZ	
a. ΔRST to ΔPST b. ΔXRT to ΔXPT