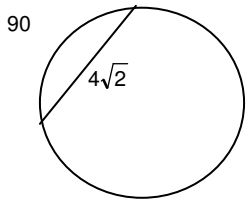
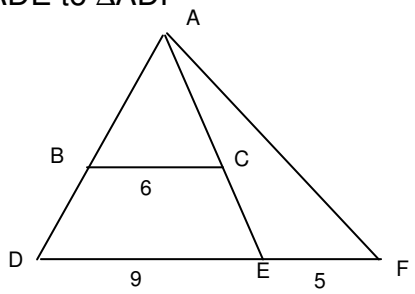
Worksheet GEOMETRY
11-5 to 11-7

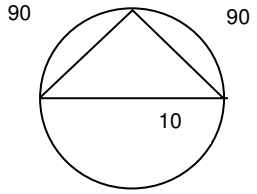
1. The areas of two circles are in the ratio 32:98. Find the ratio of their diameters.
2. The perimeters of two similar triangles are in the ratio $2:5\sqrt{5}$. Find the ratio of their areas.
3. A circle has a diameter of 42 cm. Find the circumference and the area.
4. Find the area of the shaded region.



5. A trapezoid with sides lengths 5, 4, 5, and 12 has an area of 24 m^2. Find the area of a similar trapezoid with longest side 18.
6. The area of sector AOB is 36π and $m\angle AOB = 40$. Find the length of $\overset{\frown}{AB}$.
7. Given the triangle shown, find the ratio for the areas of ΔABC to ΔADE, and ΔADE to ΔADF



8. Find the area of the shaded region.



9. $\Delta RST \sim \Delta JKL$. RS = 8, ST = 12, TR = 18 and KL = 16.
   a) What is the ratio of the perimeters of the two triangles?
   b) What is the ratio of the areas of the two triangles?

10. Find the circumference of a circle with radius $\frac{3}{11}$. Use $\pi = \frac{22}{7}$

Answers:

1. Ratio of Diameters 4:7
2. 4:125
3. C= 42π A= 441π
4. $4\pi - 8$
5. 54
6. 4π
7. Ratio of Areas 4:9 Ratio of bases 9:14
8. 50π-100
9. a) 3:4 b) 9:16
10. C=12/7