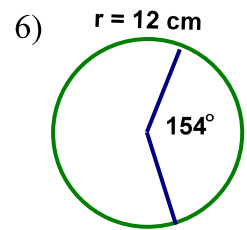Geometry Review 3.2
Algebra 2
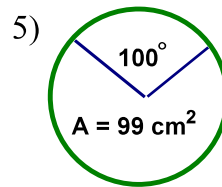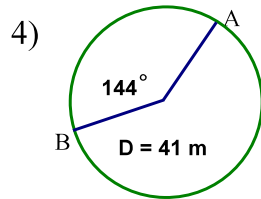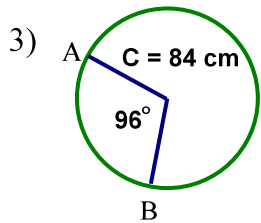
Find the missing measures in each circle. Give circumference and area in terms of pi and to the nearest tenth.

1) r =   d =   C = 56πm   A =
                                                 =   =

2) r =   d =   C =   A = 92 cm²
                                                 =

Find the length of minor arc AB using a proportion.   Find the area of the sector using a proportion.

3) A   C = 84 cm
   96°
   B

4)   A
   144°
   B   D = 41 m

5)   100°
   A = 99 cm²

6)   r = 12 cm
   154°

Given the length of one side of the 45-45-90 triangle at the right find the other two sides to the nearest tenth..

7) J = 18   8) K = $16\sqrt{2}$
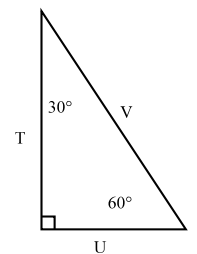
9) L = $32\sqrt{2}$ 10) L = 58

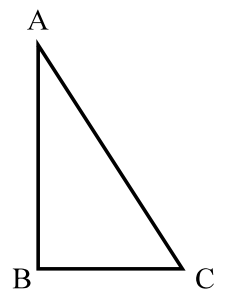Given the length of one side of the 30-60-90 triangle at the right find the other sides to the nearest tenth.

11) U = 12   12) U = $15\sqrt{3}$ 13) V = 64

14) T = $43\sqrt{3}$ 15) T = 71   16) V = $36\sqrt{3}$

In the figure at the right the ratio $\dfrac{Opposite \angle A}{Adjacent \angle A} = \dfrac{16}{63}$.

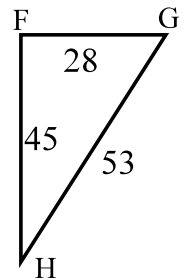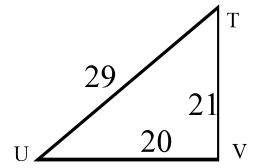17) BC = 48, find AB and AC.   18) AC = 325, find BC and AB.

Use ΔQRS to find each trig. ratio. Use a calculator to approximate each ratio to four decimal places.

19) Sin ∠U   20) Tan ∠T   21) Cos ∠F

22) Cos ∠T   23) Cos ∠G   24) Tan ∠ H

25) Sin ∠ H   26) Tan ∠U   27) Cos ∠U   28) Sin ∠G

Given a trig ratio for the triangle to the right, give the missing trig ratios.
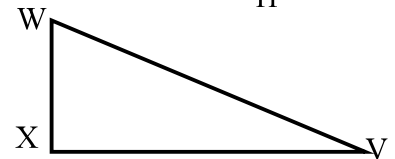
Sin ∠V = 39/89 | Tan ∠W = 77/36

29) Find Cos ∠W | 31) Find Sin ∠V

30) Find Tan ∠V | 32) Find Tan ∠W   33) Find Sin ∠X

Find the angle measure in degrees for the given number of rotations.

34) 2/3   35) 1/4   36) 5/6   37) 3/8   38) 7/4   39) 10/3

Convert the given measure in degrees to radian measure.

40) 270°   41) 120°   42) 45°   43) 135°   44) 315°   45) 510⁰

Convert the given measure in radians to degrees.

46) 3π rad   47) 8π rad   48) $\frac{3\pi}{4}$ rad   49) $\frac{11\pi}{6}$ rad   50) $\frac{5\pi}{3}$ rad   51) $\frac{14\pi}{3}$ rad

Draw the following angles in standard position.

52) 60°   53) 255°   54) 345°   55) -135°