

Geometry Review 3.1

Algebra 2

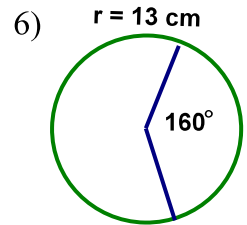
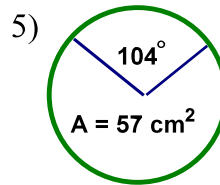
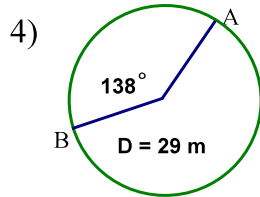
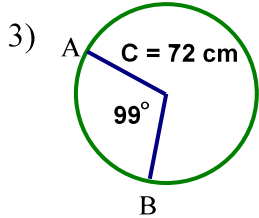
Find the missing measures in each circle. Give circumference and area in terms of pi and to the nearest tenth.

1)  $r =$   $d = 26 \text{ m}$   $C =$   $A =$   
 $=$   $=$

2)  $r =$   $d =$   $C =$   $A = 65 \text{ ft}^2$   
 $=$   $=$

Find the length of minor arc AB using a proportion.

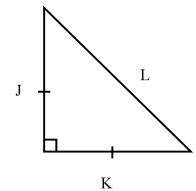
Find the area of the sector using a proportion.



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)  $J = 14$                       8)  $K = 12\sqrt{2}$

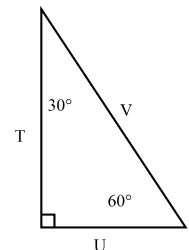
9)  $L = 17\sqrt{2}$                       10)  $L = 32$



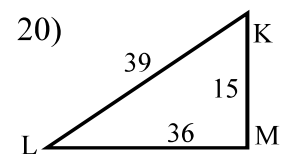
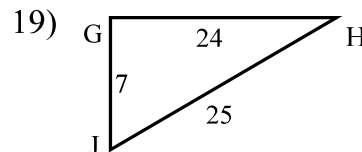
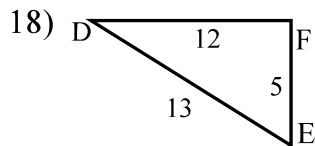
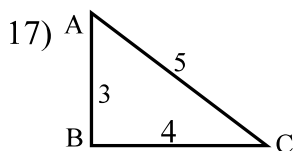
Given the length of one side of the 30-60-90 triangle at the right find the other sides to the nearest tenth.

11)  $U = 6$                       12)  $U = 7\sqrt{3}$                       13)  $V = 44$

14)  $T = 10\sqrt{3}$                       15)  $T = 38$                       16)  $V = 4\sqrt{3}$

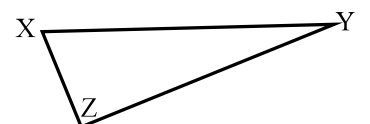


Give the six trigonometric ratios for the followings triangles.



Use  $\Delta XYZ$  to name the hypotenuse, opposite side, and adjacent side for each reference angle.

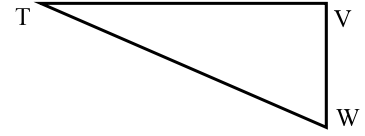
21)  $\angle X$                       22)  $\angle Y$



Use  $\triangle TVW$  to name the hypotenuse, opposite side, and adjacent side for each reference angle.

23)  $\angle T$

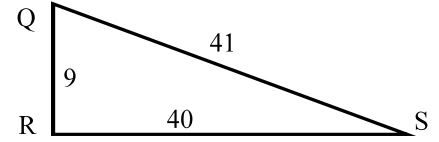
24)  $\angle W$



Use  $\triangle QRS$  to find each trig. ratio. Use a calculator to approximate each ratio to four decimal places.

25)  $\frac{\text{Opposite}\angle Q}{\text{Hypotenuse}} =$

26)  $\frac{\text{Adjacent}\angle S}{\text{Opposite}\angle S} =$



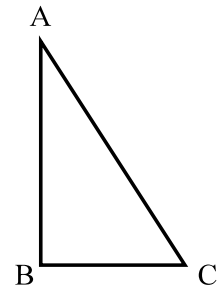
27)  $\frac{\text{Hypotenuse}}{\text{Adjacent}\angle S} =$

28)  $\frac{\text{Opposite}\angle R}{\text{Adjacent}\angle R} =$

In the figure at the right the ratio  $\frac{\text{Opposite}\angle A}{\text{Adjacent}\angle A} = \frac{8}{15}$ .

29)  $BC = 16$ , find  $AB$  and  $AC$ .

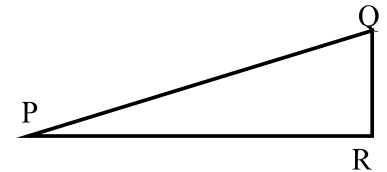
30)  $AB = 75$ , find  $BC$  and  $AC$ .



In the figure at the right the ratio  $\frac{\text{Opposite}\angle P}{\text{Hypotenuse}} = \frac{12}{37}$ .

31)  $PR = 105$ , find  $PQ$  and  $QR$ .

32)  $PQ = 185$ , find  $PR$  and  $QR$ .



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

33)  $1/2$

34)  $3/4$

35)  $1$

36)  $2$

37)  $7/3$

38)  $11/6$

Convert the given measure in degrees to radian measure.

39)  $360^\circ$

40)  $180^\circ$

41)  $90^\circ$

42)  $60^\circ$

43)  $150^\circ$

44)  $240^\circ$

Convert the given measure in radians to degrees.

45)  $\pi$  rad

46)  $2\pi$  rad

47)  $\frac{\pi}{2}$  rad

48)  $\frac{2\pi}{3}$  rad

49)  $\frac{8\pi}{3}$  rad

50)  $\frac{5\pi}{6}$  rad