

Trigonometry 3  
Algebra 2

Convert the angle measures in degree to radians.

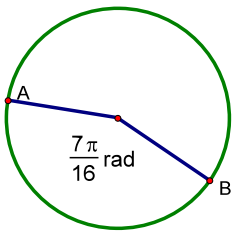
- 1)  $120^\circ$       2)  $205^\circ$       3)  $75^\circ$       4)  $405^\circ$       5)  $270^\circ$

Convert the angle measures in radians to degrees.

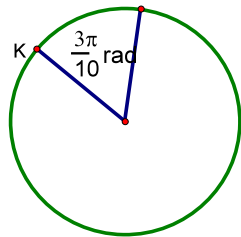
- 6)  $\frac{\pi}{8} \text{ rad}$       7)  $\frac{2\pi}{3} \text{ rad}$       8)  $\frac{5\pi}{6} \text{ rad}$       9)  $\frac{7\pi}{12} \text{ rad}$       10)  $\frac{9\pi}{16} \text{ rad}$

Find the length of minor arc AB using a proportion.

11)  $C = 68 \text{ cm}$

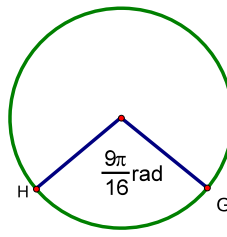


12)  $D = 44 \text{ cm}$

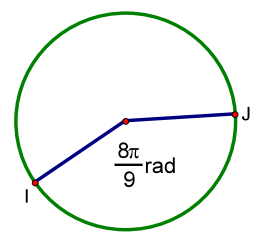


Find the area of the sector using a proportion.

13)  $A = 56 \text{ ft}^2$



14)  $r = 27 \text{ m}$



Give the indicated trigonometric ratio as a fraction and to four decimal places.

- 15)  $\tan 45^\circ$       16)  $\sin 60^\circ$       17)  $\cos 30^\circ$   
 18)  $\sin 30^\circ$       19)  $\cos 45^\circ$       20)  $\tan 60^\circ$   
 21)  $\cos 60^\circ$       22)  $\tan 30^\circ$       23)  $\sin 45^\circ$

Find the trigonometric ratios using the information given. Give the measure of each acute angle.

24)  $\cos A = 33/65$        $\tan C =$        $m\angle A =$        $m\angle C =$

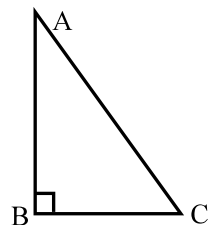
$\sin C =$

25)  $\sin A = 7/11$        $\cos A =$        $m\angle A =$        $m\angle C =$

$\tan C =$

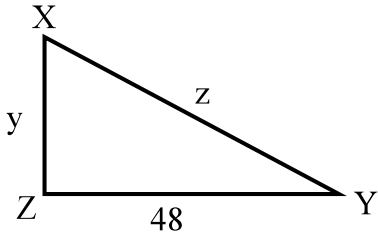
26)  $\tan C = 65/72$        $\tan A =$        $m\angle A =$        $m\angle C =$

$\sin A =$

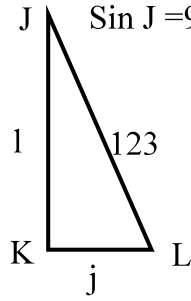


Use the information given to solve the following triangles.

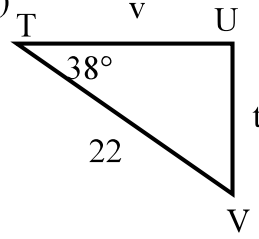
27)  $\tan X = 12/5$



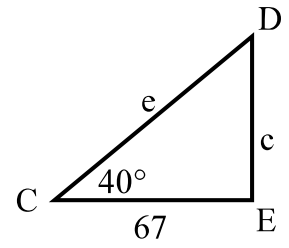
28)  $\sin J = 9/41$



29)



30)

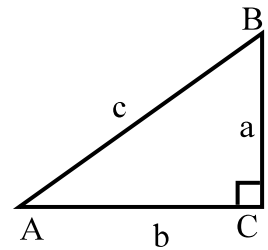


Use the given information to find the measures of the acute angles. (Use  $\triangle ABC$ .)

31)  $a = 21, c = 38$

32)  $c = 53, b = 46$

33)  $b = 72, a = 50$



Solve  $\triangle ABC$  at the right using the information given in each problem.

34)  $B = 65^\circ, a = 18$

35)  $A = 38^\circ, c = 35$