

Trigonometry 2.2

Algebra 2

Convert the angle measures in degree to radians.

Convert the angle measures in radians to degrees.

1) 215°

2) 320°

3) $\frac{11\pi}{8} \text{ rad}$

4) $\frac{13\pi}{6} \text{ rad}$

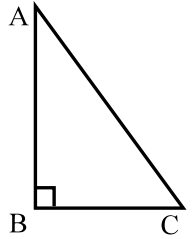
Find the trigonometric ratios using the information given. Give the measure of each acute angle.

5) $\cos C = 20/101$ $\tan C =$

$m\angle A =$

$m\angle C =$

$\sin C =$



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

6) $\tan 30^\circ$

7) $\sin 45^\circ$

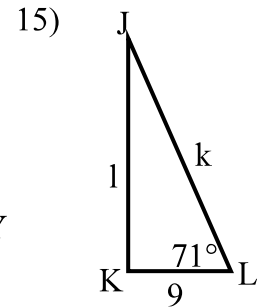
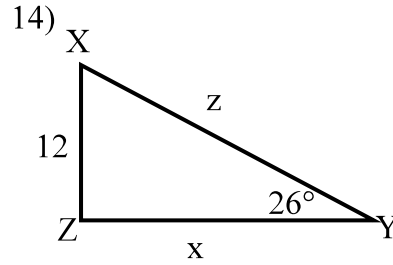
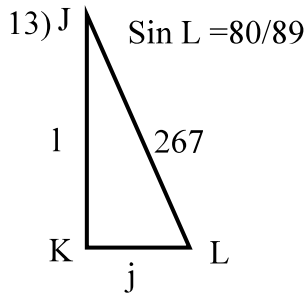
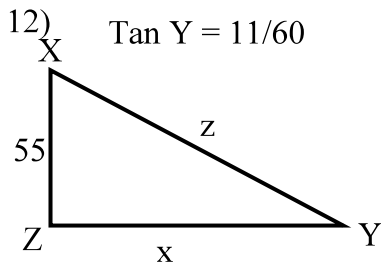
8) $\cos 60^\circ$

9) $\sin 60^\circ$

10) $\cos 45^\circ$

11) $\tan 45^\circ$

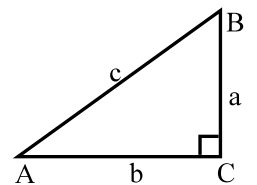
Use the information given to solve the following triangles.



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

16) $a = 12, b = 21$

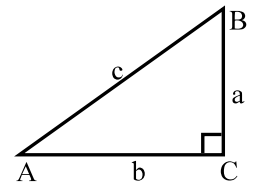
17) $a = 13, c = 29$



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

18) $B = 56^\circ$, $b = 38$

19) $A = 29^\circ$, $c = 41$



Draw each angle on the coordinate plane. Give each trigonometric ratio as a fraction and to four decimal places.

20) $\sin 45^\circ$

21) $\cos 60^\circ$

22) $\tan 30^\circ$

23) $\cos 0^\circ$

24) $\sin 150^\circ$

25) $\cos 225^\circ$

26) $\tan 315^\circ$

27) $\sin 180^\circ$

28) $\sin \frac{3\pi}{4}$

29) $\tan \frac{5\pi}{3}$

30) $\cos -60^\circ$

31) $\tan -90^\circ$