

## Sine, Cosine, and Tangent in the First Quadrant of the Unit Circle

**Find the exact value of the angle in the first quadrant.**

1)  $\sin \frac{\pi}{3}$

2)  $\tan \frac{\pi}{3}$

3)  $\tan \frac{\pi}{4}$

4)  $\cos \frac{\pi}{6}$

5)  $\sin \frac{\pi}{6}$

6)  $\cos \frac{\pi}{2}$

7)  $\cos 60^\circ$

8)  $\tan 0^\circ$

9)  $\tan 30^\circ$

10)  $\sin 90^\circ$

11)  $\cos 30^\circ$

12)  $\sin 45^\circ$

**Give your answer in degrees and radians.**

13) At which angle is  $\sin \theta = \frac{1}{2}$ ?

14) At which angle is  $\cos \theta = \frac{1}{2}$ ?

15) At which angle is  $\tan \theta = 1$ ?

16) At which angle is  $\cos \theta = \sin \theta$ ?

17) At which angle is  $\sin \theta = \frac{\sqrt{3}}{2}$ ?

18) At which angle is  $\cos \theta = \frac{\sqrt{3}}{2}$ ?