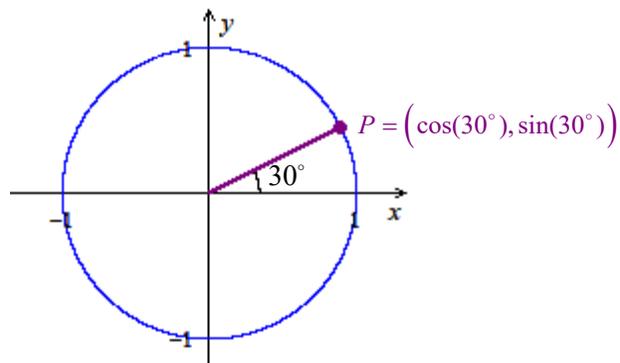


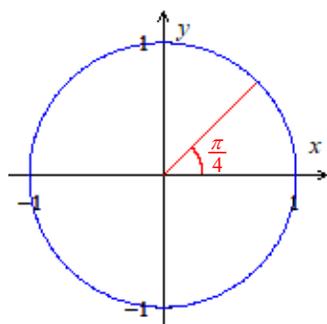
## Class Discussion: Intro to Trig, Part 2

Let's review how we can find the sine and cosine values for  $30^\circ = \frac{\pi}{6}$ .

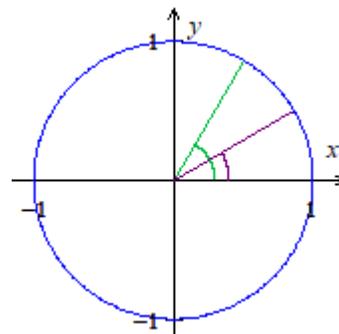


We can similarly find the sine and cosine values for  $60^\circ = \frac{\pi}{3}$ , and  $45^\circ = \frac{\pi}{4}$ . Let's summarize these values:

Multiples of  $\frac{\pi}{4}$ :

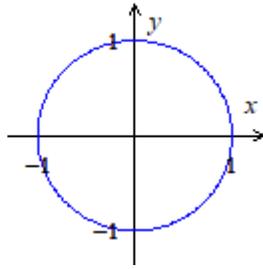


Multiples of  $\frac{\pi}{6}$  and  $\frac{\pi}{3}$ :

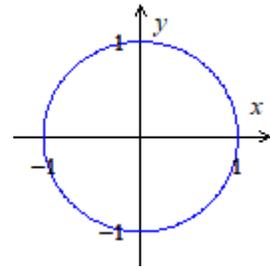


**EXAMPLES:**

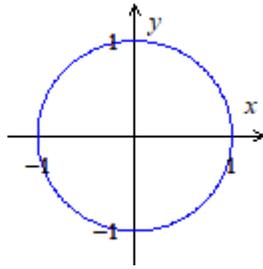
a.  $\sin\left(\frac{2\pi}{3}\right)$



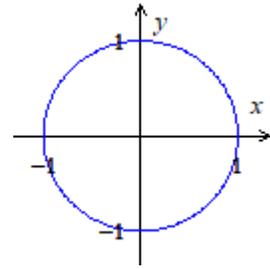
b.  $\sin\left(\frac{5\pi}{3}\right)$



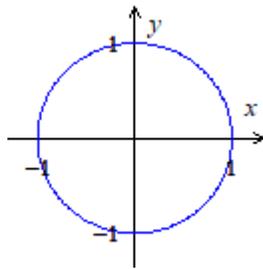
c.  $\cos\left(\frac{5\pi}{6}\right)$



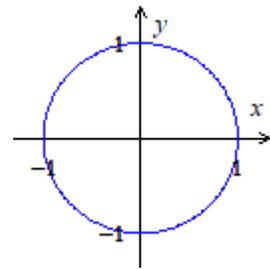
d.  $\cos\left(\frac{11\pi}{6}\right)$



e.  $\sin\left(\frac{5\pi}{4}\right)$



f.  $\sin\left(\frac{7\pi}{4}\right)$



**EXAMPLE:** If the point  $P$  is specified by the angle  $\frac{7\pi}{6}$  on a circle of radius 8 units, use the sine and cosine function to find the exact coordinates of point  $P$ .

