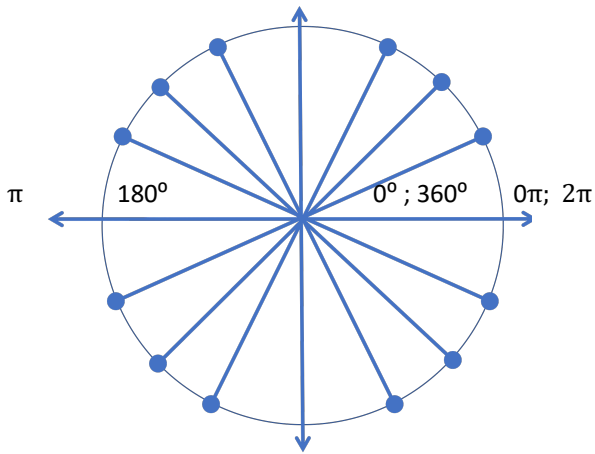
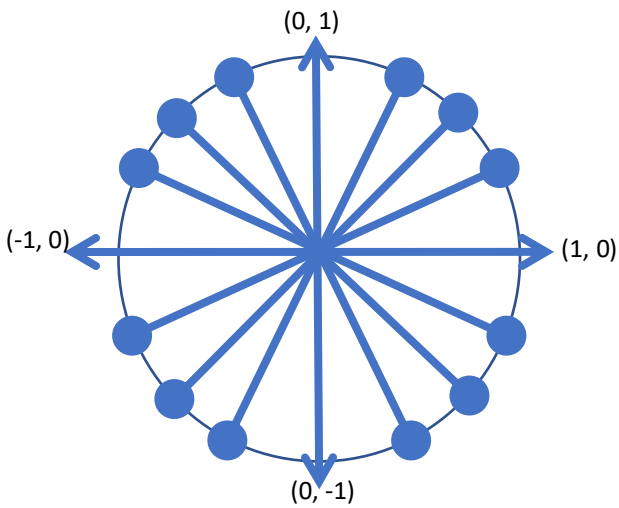


**Unit Circle Homework**

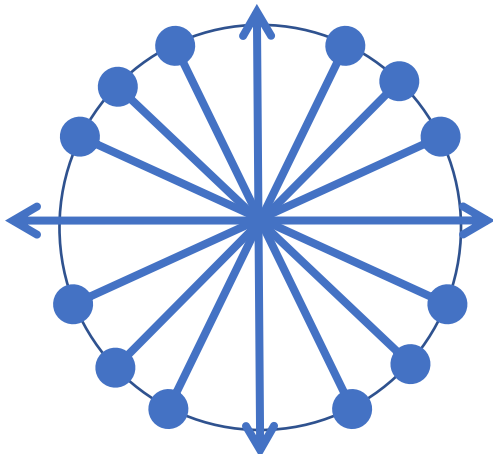
1. Write the radians of each point on the unit circle and their degrees: (i.e.  $\pi/2$ ,  $\pi$ ,  $30^\circ$  etc...)



2. Write the coordinates for all 16 points.



3. Show 8 examples of how the 30-60-90 triangle fits within the unit circle:



Find the exact value of each expression. Use the Unit Circle.

1)  $\csc \frac{7\pi}{3}$

2)  $\cos \frac{7\pi}{6}$

3)  $\sin \frac{11\pi}{6}$

4)  $\csc 0$

5)  $\cos -\frac{5\pi}{6}$

6)  $\sin \frac{19\pi}{6}$

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

8)  $\csc \frac{2\pi}{3}$

9)  $\cos -\frac{\pi}{2}$

10)  $\tan -\frac{\pi}{6}$

11)  $\cot \frac{3\pi}{2}$

12)  $\cot \frac{3\pi}{4}$

13)  $\tan \frac{5\pi}{4}$

14)  $\cos -\frac{\pi}{6}$

15)  $\tan \frac{7\pi}{4}$

16)  $\sin \frac{2\pi}{3}$

17)  $\sec -\frac{3\pi}{4}$

18)  $\sin \frac{\pi}{2}$

19)  $\sin \frac{11\pi}{4}$

20)  $\sec \frac{3\pi}{4}$