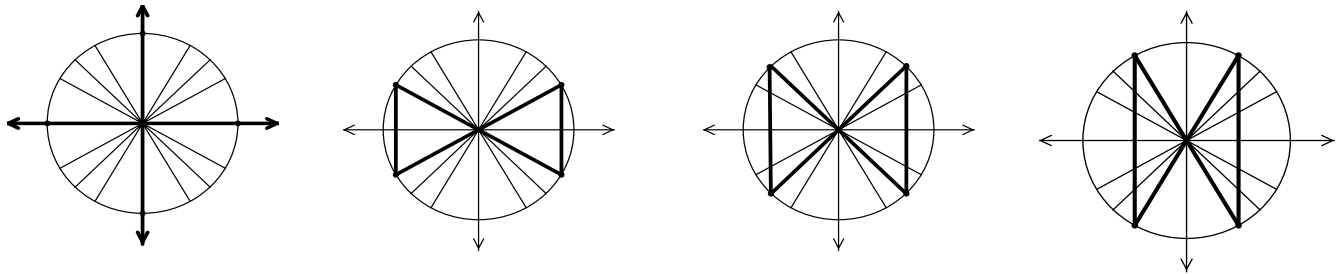


Name \_\_\_\_\_ Date \_\_\_\_\_  
 Unit Circle 5

- 1) Use the unit circles below for the reference angles  $90^\circ, 30^\circ, 45^\circ, 60^\circ$ .  
 For each reference angle, label the four angles  $0 \leq \theta \leq 2\pi$  in standard position using radian measure and name their terminal points.



- 2) Find the exact value.

a.  $\cos \frac{7\pi}{6}$       b.  $\sin \frac{3\pi}{2}$       c.  $\tan \frac{2\pi}{3}$       d.  $\sec \frac{5\pi}{6}$       e.  $\csc \pi$       f.  $\cot \frac{7\pi}{4}$

g.  $\cos 135^\circ$       h.  $\sin 240^\circ$       i.  $\tan 45^\circ$       j.  $\sec 150^\circ$       k.  $\csc 30^\circ$       l.  $\cot 120^\circ$

- 3) Find all the angles for  $0 \leq \theta \leq 2\pi$ .

a.  $\sin \theta = 1$       b.  $\cos \theta = \frac{\sqrt{2}}{2}$       c.  $\tan \theta = \sqrt{3}$

d.  $\sec \theta = \frac{2}{\sqrt{3}}$       e.  $\csc \theta = -2$       f.  $\cot \theta = -1$

- 4) Describe the behavior of the trig. function as  $t$  increases from 0 to  $\frac{\pi}{2}$ .

a.  $\sin t$       b.  $\tan t$       c.  $\sec t$

- 5) Describe the behavior of the trig. function as  $t$  increases from  $\frac{\pi}{2}$  to  $\pi$ .

a.  $\cos t$       b.  $\cot t$       c.  $\csc t$