© 2013 Kuta Software LLC. All rights reserved.

Draw unit circle as fast as you can. Then use the unit circle to answer the following questions.

$$1) \sin{-\frac{5\pi}{6}}$$

3) 
$$\cos -\frac{3\pi}{2}$$

8) 
$$\cos \pi$$

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

14) 
$$\sin{-\frac{2\pi}{3}}$$

17) 
$$\cos -\frac{11\pi}{6}$$

21) 
$$\cot -\frac{11\pi}{6}$$

22) 
$$\csc \frac{4\pi}{3}$$

23) 
$$\cot -\pi$$

24) 
$$\sec -\frac{\pi}{4}$$

25) 
$$\cos \frac{\pi}{3}$$

27) 
$$\cot -\frac{\pi}{6}$$

28) 
$$\sin \pi$$

29) 
$$\tan \frac{7\pi}{6}$$

30) 
$$\sec -\frac{5\pi}{4}$$

© 2013 Kuta Software LLC. All rights reserved.

Draw unit circle as fast as you can. Then use the unit circle to answer the following questions.

1) 
$$\sin{-\frac{5\pi}{6}} - \frac{1}{2}$$

3) 
$$\cos -\frac{3\pi}{2}$$

5)  $\cos -135^{\circ} - \frac{\sqrt{2}}{2}$ 

7) 
$$\cos 330^{\circ} \frac{\sqrt{3}}{2}$$

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

11)  $\sin -135^{\circ} - \frac{\sqrt{2}}{2}$ 

13) 
$$\cos -150^{\circ} - \frac{\sqrt{3}}{2}$$

15) 
$$\sin -330^{\circ} \frac{1}{2}$$

17) 
$$\cos -\frac{11\pi}{6} \frac{\sqrt{3}}{2}$$

19) 
$$\cos 300^{\circ} \frac{1}{2}$$

21) 
$$\cot -\frac{11\pi}{6} \sqrt{3}$$

23) 
$$\cot -\pi$$
 Undefined

25) 
$$\cos \frac{\pi}{3} \frac{1}{2}$$

27) 
$$\cot -\frac{\pi}{6} - \sqrt{3}$$

29) 
$$\tan \frac{7\pi}{6} = \frac{\sqrt{3}}{3}$$

2) 
$$\sin 300^{\circ} - \frac{\sqrt{3}}{2}$$

4) 
$$\sin 315^{\circ} - \frac{\sqrt{2}}{2}$$

6) 
$$\sin 135^{\circ} \frac{\sqrt{2}}{2}$$

8) 
$$\cos \pi$$

10) 
$$\cos 120^{\circ} - \frac{1}{2}$$

12) 
$$\cos 150^{\circ} - \frac{\sqrt{3}}{2}$$

14) 
$$\sin -\frac{2\pi}{3} - \frac{\sqrt{3}}{2}$$

16) 
$$\cos -315^{\circ} \frac{\sqrt{2}}{2}$$

18) 
$$\cos -120^{\circ} -\frac{1}{2}$$

20) 
$$\sin -300^{\circ} \frac{\sqrt{3}}{2}$$

22) 
$$\csc \frac{4\pi}{3} - \frac{2\sqrt{3}}{3}$$

24) 
$$\sec{-\frac{\pi}{4}} \sqrt{2}$$

28) 
$$\sin \pi$$

30) 
$$\sec -\frac{5\pi}{4} - \sqrt{2}$$

© 2013 Kuta Software LLC. All rights reserved.

Draw unit circle as fast as you can. Then use the unit circle to answer the following questions.

1) sin 60°

2)  $\cos -\frac{2\pi}{3}$ 

 $3) \sin -60^{\circ}$ 

4)  $\sin \frac{5\pi}{3}$ 

5) sin -45°

6) cos 270°

7)  $\cos -60^{\circ}$ 

8)  $\cos \frac{5\pi}{3}$ 

9) cos 45°

10) sin −270°

11) cos 90°

12) cos -240°

13) sin 225°

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

15) sin 90°

16)  $\sin -\frac{5\pi}{4}$ 

17) cos -225°

18)  $\sin{-\frac{\pi}{6}}$ 

19) sin -90°

20) sin 240°

21)  $\tan -\frac{11\pi}{6}$ 

22)  $\csc -\frac{3\pi}{4}$ 

23)  $\csc -\pi$ 

24) cot 0

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

26)  $\sec \frac{5\pi}{4}$ 

 $27) \sin \frac{7\pi}{4}$ 

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

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

30)  $\csc \frac{7\pi}{4}$ 

Date\_\_\_\_\_ Period\_\_\_\_

© 2013 Kuta Software LLC. All rights reserved.

Draw unit circle as fast as you can. Then use the unit circle to answer the following questions.

1) 
$$\sin 60^{\circ} \frac{\sqrt{3}}{2}$$

3) 
$$\sin -60^{\circ} - \frac{\sqrt{3}}{2}$$

5) 
$$\sin -45^{\circ} - \frac{\sqrt{2}}{2}$$

7) 
$$\cos -60^{\circ} \frac{1}{2}$$

9) 
$$\cos 45^{\circ} \frac{\sqrt{2}}{2}$$

13) 
$$\sin 225^{\circ} - \frac{\sqrt{2}}{2}$$

17) 
$$\cos -225^{\circ} - \frac{\sqrt{2}}{2}$$

21) 
$$\tan -\frac{11\pi}{6} \frac{\sqrt{3}}{3}$$

23) 
$$\csc -\pi$$

Undefined

25) 
$$\tan -\frac{\pi}{6} - \frac{\sqrt{3}}{3}$$

27) 
$$\sin \frac{7\pi}{4} - \frac{\sqrt{2}}{2}$$

29) 
$$\sin \frac{5\pi}{6} \frac{1}{2}$$

2) 
$$\cos -\frac{2\pi}{3} - \frac{1}{2}$$

4) 
$$\sin \frac{5\pi}{3} - \frac{\sqrt{3}}{2}$$

0

8) 
$$\cos \frac{5\pi}{3} \frac{1}{2}$$

1

12) 
$$\cos -240^{\circ} -\frac{1}{2}$$

14) 
$$\sin \frac{2\pi}{3} \frac{\sqrt{3}}{2}$$

16) 
$$\sin -\frac{5\pi}{4} \frac{\sqrt{2}}{2}$$

18) 
$$\sin{-\frac{\pi}{6}} - \frac{1}{2}$$

20) 
$$\sin 240^{\circ} - \frac{\sqrt{3}}{2}$$

22) 
$$\csc -\frac{3\pi}{4} - \sqrt{2}$$

24) cot 0

Undefined

26) 
$$\sec \frac{5\pi}{4} - \sqrt{2}$$

28) 
$$\cos \frac{7\pi}{6} - \frac{\sqrt{3}}{2}$$

30) 
$$\csc \frac{7\pi}{4} - \sqrt{2}$$