

Quiz#2**Multiple Choice**

Identify the choice that best completes the statement or answers the question.

_____ 1. Find the point (x, y) on the unit circle that corresponds to the real number $\frac{5\pi}{6}$. Use your results to evaluate $\cos t$.

a. $\cos t = \frac{\sqrt{3}}{2}$

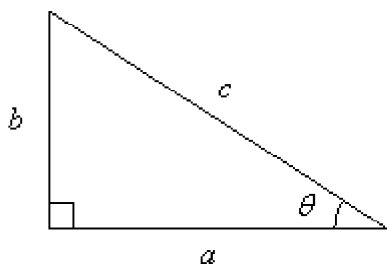
b. $\cos t = -\frac{\sqrt{3}}{2}$

c. $\cos t = -\frac{1}{2}$

d. $\cos t = -1$

e. $\cos t = 1$

_____ 2. Find the exact value of $\csc \theta$, using the triangle shown in the figure below, if $a = 7$ and $b = 24$.



a. $\frac{24}{25}$

b. $\frac{7}{24}$

c. $\frac{25}{7}$

d. $\frac{7}{25}$

e. $\frac{25}{24}$

___ 3. Given $\sec \theta = \sqrt{10}$ and $\tan \theta = 3$, determine the following.

$$\cot(90^\circ - \theta)$$

a. $\cot(90^\circ - \theta) = \sqrt{10}$

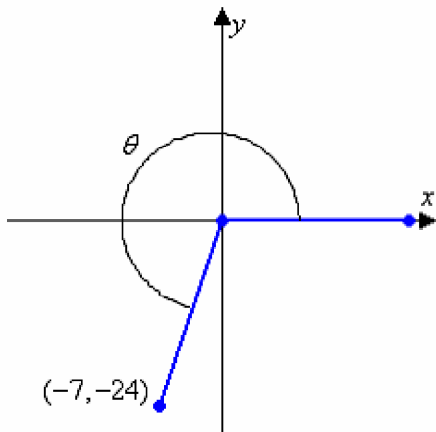
b. $\cot(90^\circ - \theta) = \frac{1}{3}$

c. $\cot(90^\circ - \theta) = 3$

d. undefined

e. $\cot(90^\circ - \theta) = \frac{\sqrt{10}}{3}$

___ 4. Given the figure below, determine the value of $\sin \theta$.



a. $\sin \theta = \frac{24}{7}$

b. $\sin \theta = -\frac{7}{25}$

c. $\sin \theta = -\frac{7}{24}$

d. $\sin \theta = \frac{7}{24}$

e. $\sin \theta = -\frac{24}{25}$

___ 5. The point $(-5, -12)$ is on the terminal side of an angle in standard position. Determine the exact value of $\sec \theta$.

a. $\sec \theta = \frac{12}{5}$

b. $\sec \theta = \frac{5}{12}$

c. $\sec \theta = \frac{17}{12}$

d. $\sec \theta = -\frac{13}{5}$

e. $\sec \theta = \frac{8}{13}$

Name: _____

ID: A

- _____ 6. State the quadrant in which θ lies if $\tan\theta > 0$ and $\cos\theta > 0$.
- a. Quadrant II
 - b. Quadrant III
 - c. Quadrant I
 - d. Quadrant IV

Quiz#2
Answer Section

MULTIPLE CHOICE

- | | | |
|-----------|--------|--|
| 1. ANS: B | PTS: 1 | OBJ: Evaluate trig function using unit circle |
| 2. ANS: E | PTS: 1 | OBJ: Determine trig value from diagram |
| 3. ANS: C | PTS: 1 | OBJ: Determine trig value given sec and tan |
| 4. ANS: E | PTS: 1 | OBJ: Determine trig value from diagram |
| 5. ANS: D | PTS: 1 | OBJ: Determine value of trig function given point on terminal side |
| 6. ANS: C | PTS: 1 | OBJ: Determine quadrant given constraints |