

1.

Express the angle in decimal degrees to the nearest hundredth:

$16^{\circ}35'23''$

2.

Name two angles coterminal  
with  $125^\circ$ .

Can you write a formula to express all angles  
coterminal with  $125^\circ$ ?

3.

Find the values of the six trigonometric functions of  $\theta$  if the terminal side of  $\theta$  passes through  $P(-2, 1)$ .

4.

If  $\sin \theta = -\frac{\sqrt{3}}{2}$  and  $\cos \theta < 0$ ,

find the other five trigonometric functions.

5.

Express in radian measures:

*(leave answers in terms of  $\pi$ )*

a.)  $-84^\circ$     b.)  $108^\circ$     c.)  $630^\circ$

6.

Determine the arc length and area of the sector of a circle if the central angle has measure  $45^\circ$  and the radius is 2.

7.

Find the exact value of  $\tan \frac{25\pi}{6}$

8.

Express as a function of an acute angle:

a.)  $\cos 118^\circ$

b.)  $\sin(-195^\circ)$

c.)  $\sec(300^\circ)$

9.

If  $0 < \theta < 2\pi$  determine the values of  $\theta$  that make:

a.)  $\sin \theta = 1$

$$\text{b.) } \csc \theta = -\frac{2\sqrt{3}}{3}$$

10.

Explain why the statement  
 $\cos \theta = 1.2$  cannot be correct.

11.

Evaluate  $\sin\left(-\frac{\pi}{2}\right) + \cos^2\left(\frac{3\pi}{4}\right)$