

April 2, 2007

Answer Questions Section 9.2

Problem #9

Sine and cosine of the angle  $19\pi/6 = 3\pi + \pi/6$

First thing is draw the angle

The terminal side is in the third quadrant and the reference angle is  $\pi/6$

$$\sin \frac{19\pi}{6} = -\sin \frac{\pi}{6} = -\frac{1}{2}$$

$$\cos \frac{19\pi}{6} = -\cos \frac{\pi}{6} = -\frac{\sqrt{3}}{2}$$

Problem #31

I need the length of the hypotenuse =

$$\sqrt{6^2 + 8^2} = \sqrt{36 + 64} = \sqrt{100} = 10$$

$$\sin \gamma = \frac{opp}{hyp} = \frac{8}{10} = \frac{4}{5}$$

$$\cos \gamma = \frac{adj}{hyp} = \frac{6}{10} = \frac{3}{5}$$