

April 2, 2007
Questions Section 9.2

Problem #9

angle $19\pi/6$

We want

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

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

We need to find the reference angle; so we need to draw the angle. This is 1.5 times around plus an additional $\pi/6$. So the reference angle is $\pi/6$ and the terminal side of the angle is in the third quadrant. That means that sine and cosine are both negative.

Problem #15

$$\sin \alpha = \frac{\sqrt{5}}{3}$$

$$\cos \alpha = -\frac{2}{3}$$