1. If the terminal side of $\theta$ is not along an axis or in Quadrant I, state the reference angle. Then find the exact value of cosine and sine.

(a) $\theta = 0$

(b) $\theta = \frac{\pi}{4}$

(c) $\theta = \frac{\pi}{3}$

(d) $\theta = \frac{\pi}{2}$

(e) $\theta = \frac{2\pi}{3}$

(f) $\theta = \frac{3\pi}{4}$

(g) $\theta = \pi$
2. Suppose $\alpha$ is a Quadrant II angle with $\sin(\alpha) = \frac{12}{13}$. Find $\cos(\alpha)$.

3. Find $\alpha$, $a$, and $b$.

4. Suppose the terminal side of $\theta$ contains the point $(3, -4)$. Find $\cos(\theta)$ and $\sin(\theta)$.

5. Find all real numbers $x$ which satisfy $\cos(x) = 0$. 

\[ \begin{array}{c}
\alpha \\
\downarrow \\
33^\circ \quad 8 \\
\end{array} \]