

9-4 Circular Functions

_____ 1. If an angle is formed with the x-axis (initial side) and the terminal side is a line that goes through the coordinates (3, 4) find

$$\sin \theta = \underline{\hspace{2cm}} \quad \cos \theta = \underline{\hspace{2cm}}$$

_____ 2. Find $\sin \theta$ when $\cos \theta = \frac{12}{13}$ and the terminal side of θ is in the 1st quadrant.

_____ 3. Find $\csc \theta$ when $\sin \theta = \frac{3}{4}$ and the terminal side of θ is in the 1st quadrant.

_____ 4. Find $\cot \theta$ when $\cos \theta = \frac{40}{41}$ and the terminal side of θ is in the 1st quadrant.

_____ 5. Find $\sec \theta$ when $\tan \theta = \frac{12}{5}$ and the terminal side of θ is in the 1st quadrant.

9-5 Finding Missing Angles

Given the coordinate point, determine the angle formed with the x-axis in the **first** quadrant. Assume that the angle opens **counterclockwise** (in other words, all angles are to be positive).

1. (2, 6) $\theta \approx$ _____

2. (-2, 5) $\theta \approx$ _____

3. (1, -5) $\theta \approx$ _____

4. (1, 1) $\theta \approx$ _____

5. (-2, -5) $\theta \approx$ _____