

§4.2: Reference Angles & Unit Circle

“I WILL...

...Identify reference angles of a given angle

...Apply the six trig functions on the coordinate plane from a point.”

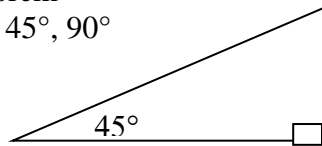
I. Reference Angles

- A. Reference angle is a positive acute angle formed by the terminal side of θ and the -axis. They are viewed as linear pairs. (Think: REFER’s back to the x-axis)
- B. The main angle should be within 0 and 360 degrees.
- C. No reference trigonometric values of measure are greater than 90° or less than to 0°
 1. Quadrant I: _____
 2. Quadrant II: _____
 3. Quadrant III: _____
 4. Quadrant IV: _____

Ex 1: Determine the reference angle for $\theta = 135^\circ$	Ex 2: Determine the reference angle for $\theta = \frac{11\pi}{6}$
Ex 3: Determine the reference angle for $\theta = 3$ Radians	Your Turn: Determine the reference angle for $\theta = -\frac{\pi}{7}$

II. Reciprocal Identities Theorem

- A. Right Triangles: $45^\circ, 45^\circ, 90^\circ$



- $30^\circ, 60^\circ, 90^\circ$

