

2.1 Angles in Standard Position

Initial Arm:

-arm of an angle that lies on x-axis

Terminal Arm

-arm of an angle that meets the initial arm at the origin to form an angle

Angle in Standard position

-vertex at the origin with the initial arm located on the positive x-axis.

Quadrants:

There are 4 quadrants divided by the x and y-axes as follows:

Reference Angle

For each angle in standard position, the **reference angle** is the acute angle between the **terminal arm** and the **x-axis**.

Example 1: Sketch the following angles in Standard Position

i. State the quadrant

ii. Find the reference Angle

a.) $\theta = 35^\circ$

b.) $\theta = 210^\circ$

c.) $\theta = 320^\circ$

d.) $\theta = 130^\circ$

Special Triangles: