

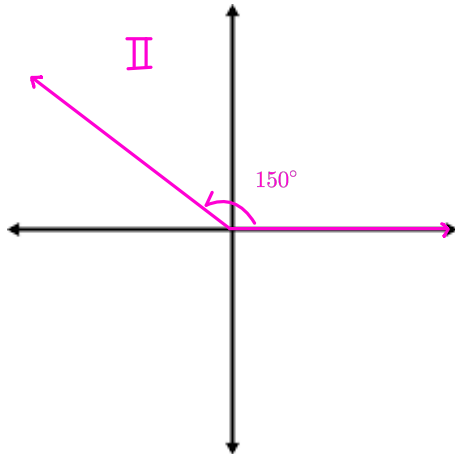
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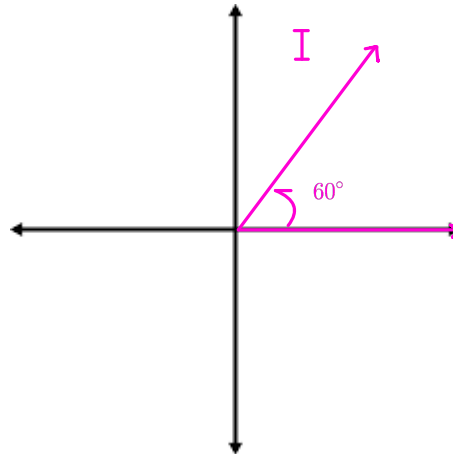
Learning Goal 2.1

Using angles in standard position and relating them to special angle triangles, the unit circle, reference and co-terminal angles and the terminal arm.

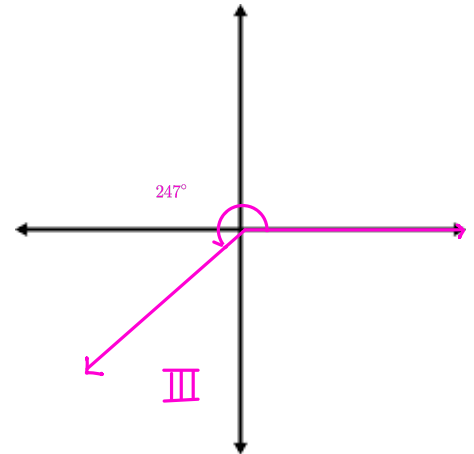
Sketch each angle in standard position. State the quadrant in which the terminal arm lies. Find the value of the reference angle.

a. 150° 

$$\theta_R = 180^\circ - 150^\circ = 30^\circ$$

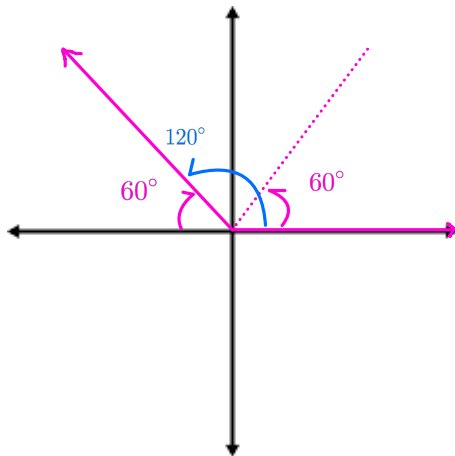
b. 60° 

$$\theta_R = 0^\circ + 60^\circ = 60^\circ$$

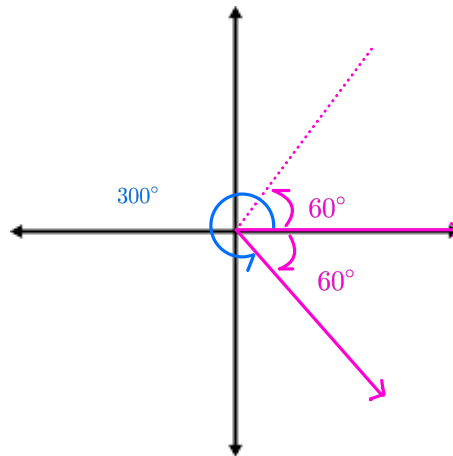
c. 247° 

$$\theta_R = 247^\circ - 180^\circ = 67^\circ$$

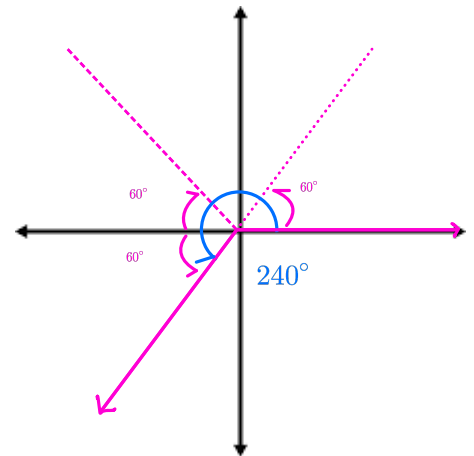
Example Determine the angle in standard position when an angle of 60° is reflected

a. over the y - axis

$$\theta_R = 180^\circ - 60^\circ = 120^\circ$$

b. over the x - axis

$$\theta_R = 360^\circ - 60^\circ = 300^\circ$$

c. over the y - , then the x - axis

$$\theta_R = 180^\circ + 60^\circ = 240^\circ$$