

Starter: Use your knowledge of the unit circle to...

Find the radians of the following degrees...

$$-45^\circ$$

$$315^\circ$$

$$240^\circ$$

Find the degrees of the following radians...

$$\frac{\pi}{4}$$

$$\frac{7\pi}{6}$$

$$-\frac{5\pi}{3}$$

## 6-2 Angles and Radians

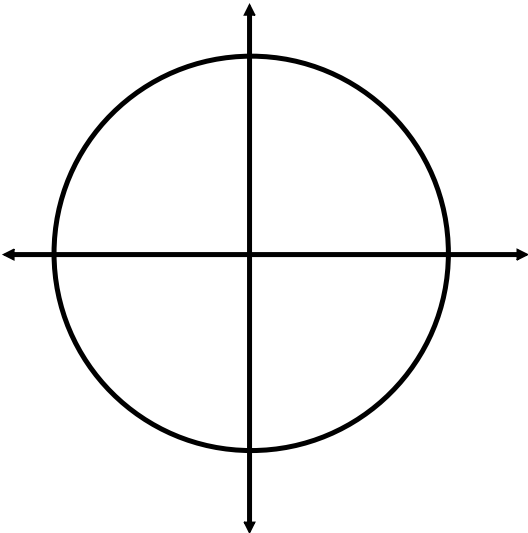
Objectives:

6-2a: I can draw angles in radians.

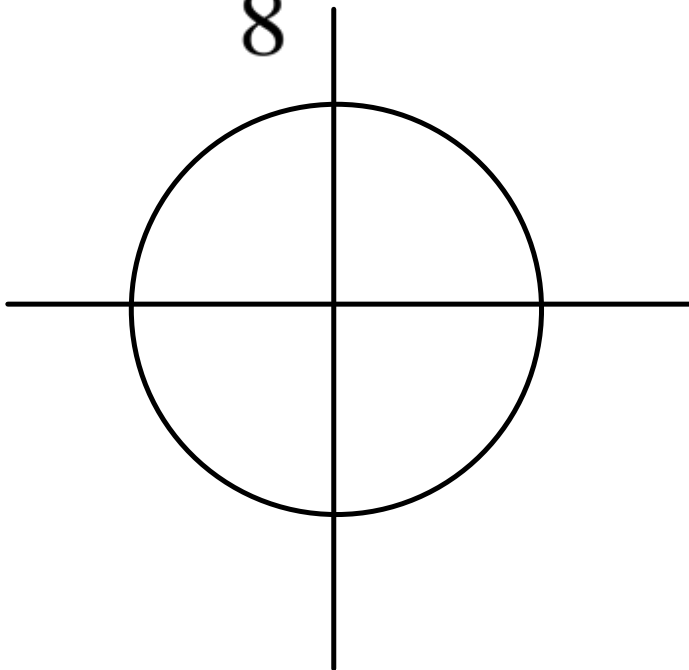
6-2b: I can find co-terminal angles in degrees & radians.

6-2c: I can find reference angles in radians.

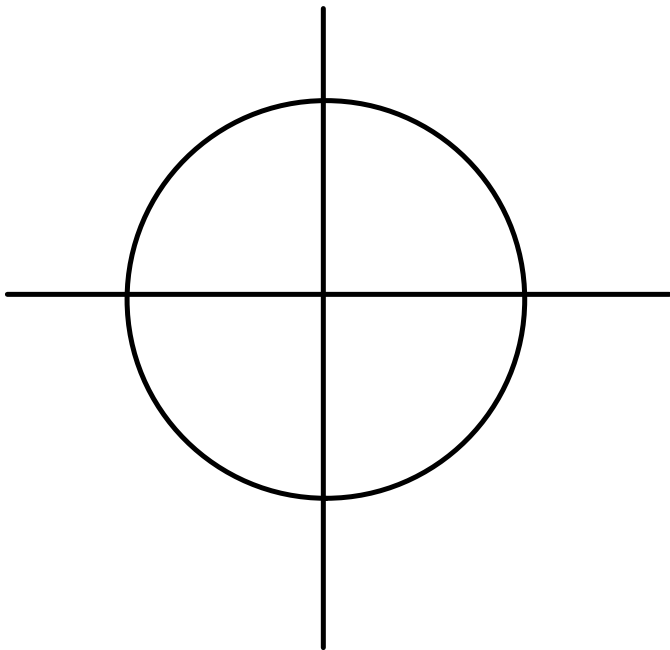
How do I find 22.5 degrees on the circle below?



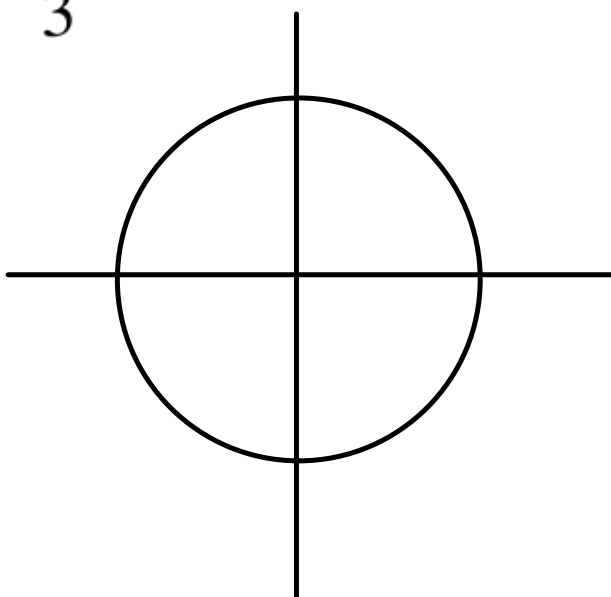
How do I find  $\frac{\pi}{8}$  radians on the circle below



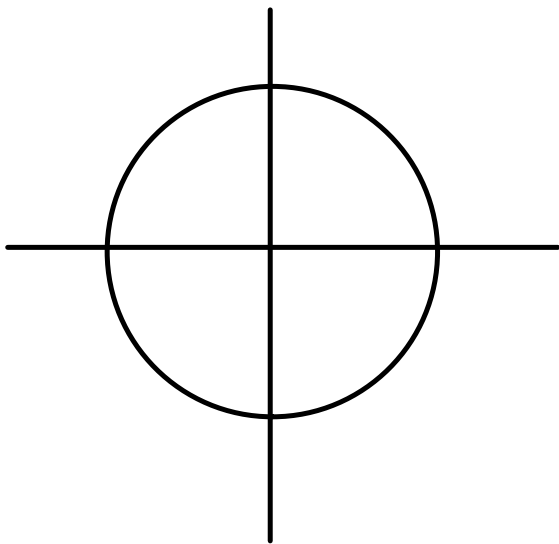
Can I find an angle co-terminal to  $\frac{\pi}{8}$ ?



Find  $\frac{4\pi}{3}$  radians on the circle below



Find an angle co-terminal to  $\frac{4\pi}{3}$



What is the reference angle?

For each angle, find the nearest positive coterminal angle and the nearest negative coterminal angle.

$$-\frac{\pi}{2}$$

$$\frac{11\pi}{6}$$

$$\frac{2\pi}{3}$$

$$-\frac{\pi}{4}$$



Convert the following angles, in degrees, to radians.

A.  $20^\circ$

C.  $-\frac{7\pi}{12}$

B.  $\frac{9\pi}{2}$

D.  $-60^\circ$

You TRY...Convert the following angles, in degrees to radians or radians to degrees...

$$315^\circ$$

$$\frac{5\pi}{6}$$

