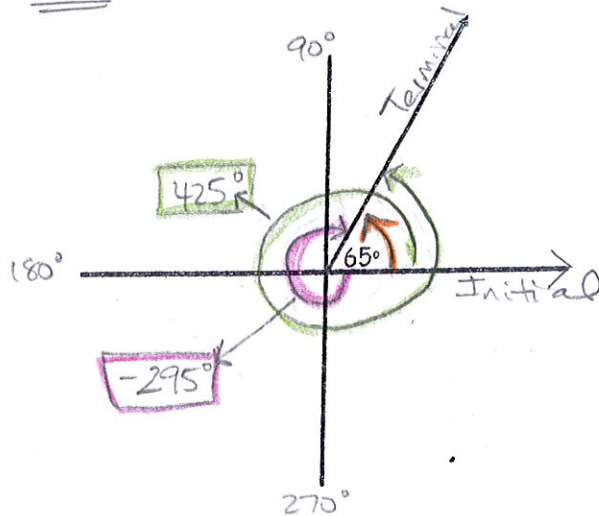


## Coterminal Angles

Two angles are coterminal if ... they have the same initial side & terminal side.

$$\begin{array}{r} 360 \\ - 65 \\ \hline 295^\circ \end{array}$$

$$\begin{array}{r} 360 \\ + 65 \\ \hline 425^\circ \end{array}$$



Find two coterminal angles (one positive and one negative) for each angle.

$\pm 360$   
 $\pm 2\pi$

a)  $390^\circ$



$$\begin{array}{r} 390 \\ - 360 \\ \hline 30^\circ \end{array}$$

$$\begin{array}{r} 390 \\ + 360 \\ \hline -330^\circ \end{array}$$

b)  $-\frac{7\pi}{3}$

$$-\frac{7\pi}{3} + 2\pi$$

$$= -\frac{7\pi}{3} + \frac{6\pi}{3} = \boxed{-\frac{\pi}{3}}$$

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

$$= -\frac{\pi}{3} + \frac{6\pi}{3} = \boxed{\frac{5\pi}{3}}$$

c)  $\frac{17\pi}{6}$

$$\frac{17\pi}{6} - 2\pi$$

$$= \frac{17\pi}{6} - \frac{12\pi}{6} = \boxed{\frac{5\pi}{6}}$$

$$\frac{5\pi}{6} - 2\pi$$

$$= \frac{5\pi}{6} - \frac{12\pi}{6} = \boxed{-\frac{7\pi}{6}}$$