## Coterminal Angles

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



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

|  | $2 \pi=\frac{6 \pi}{3}$ | $2 \pi=\frac{12 \pi}{6}$ |
| :---: | :---: | :---: |
| a) $390^{\circ}$ | b) $-\frac{7 \pi}{3}$ | c) $\frac{17 \pi}{6}$ |
| $\begin{array}{r} 390^{\circ} \\ -360^{\circ} \end{array}$ | $-\frac{7 \pi}{3}+\frac{6 \pi}{3}=-\frac{\pi}{3}$ | $\frac{17 \pi}{6}-\frac{12 \pi}{6}=\frac{5 \pi}{6}$ |
| $30^{\circ}$ | $\frac{-\pi}{3}+\frac{6 \pi}{3}=\frac{5 \pi}{3}$ | $\frac{5 \pi}{6}-\frac{12 \pi}{6}=-\frac{7 \pi}{6}$ |
| $\begin{array}{r} 30^{\circ} \\ -360^{\circ} \\ \hline \end{array}$ |  |  |
| -330 |  |  |

