
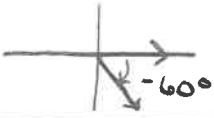
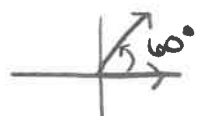


Basic Terminology	
Initial side vs Terminal side <small>starting</small> <small>ending</small>	
Clockwise rotation generates a <u>negative</u> measure	
Clockwise Counterclockwise rotation generates a <u>positive</u> measure	

1. Convert $74^\circ 08' 14''$ to decimal degrees to the nearest thousandth.

$$74^\circ + \frac{8}{60} + \frac{14}{3600} \approx \boxed{74.137^\circ}$$

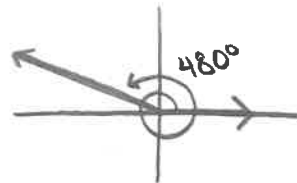
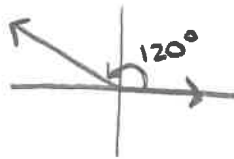
$$74^\circ + 0.13333^\circ + 0.0039^\circ$$

2. Convert 34.817° to degrees, minutes, and seconds to the nearest second. *0.02' $\cdot \frac{60''}{1'}$

$$\begin{aligned} &= 34^\circ + 0.817^\circ \\ &= 34^\circ + 0.817(60') \quad *0.817 \cdot \frac{60'}{1^\circ} \\ &= 34^\circ + 49.02' \\ &= 34^\circ + 49' + 0.02' \\ &= 34^\circ + 49' + 0.02(60'') \\ &= 34^\circ + 49' + 1.2'' \\ &= \boxed{34^\circ + 49' + 01''} \end{aligned}$$

Coterminal Angles \rightarrow have the same initial side and the same terminal side, but different amounts of rotation.

Examples:



2. Find the angle of least positive measure that is coterminal with each angle.

a. 1106°

b. -150°

c. -603°

$$1106 - 360 = 746$$

$$-150 + 360 = 210$$

$$-603 + 360 + 360$$

$$746 - 360 = 386$$

$$\boxed{210^\circ}$$

$$= \boxed{117^\circ}$$

$$386 - 360 = 26$$

$$\boxed{26^\circ}$$