

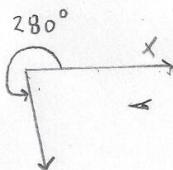
PRE-AP ALGEBRA 2

4A.1 CLASSWORK

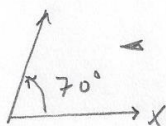
- 1) For each angle, find two coterminal angles in degrees (one positive and one negative). Also, draw the angle.

- a) 280°
b) -650°

$$(a) \begin{aligned} 280^\circ - 360^\circ &= -80^\circ \\ 280^\circ + 360^\circ &= 640^\circ \end{aligned}$$



$$(b) \begin{aligned} -650^\circ + 360^\circ &= -290^\circ \\ -290^\circ + 360^\circ &= 70^\circ \end{aligned}$$



- 2) Convert the angles to radians.

- a) 517.5°
b) -210°

$$(a) \left(\frac{517.5^\circ}{1} \right) \left(\frac{\pi}{180^\circ} \right) = \frac{23\pi}{3}$$

$$(b) \left(-\frac{210^\circ}{1} \right) \left(\frac{\pi}{180^\circ} \right) = -\frac{7\pi}{6}$$

- 3) Convert the angles to degrees.

- a) $\frac{5\pi}{2}$
b) $-\frac{19\pi}{8}$

$$(a) \left(\frac{5\pi}{2} \right) \left(\frac{180^\circ}{\pi} \right) = 450^\circ$$

$$(b) \left(-\frac{19\pi}{8} \right) \left(\frac{180^\circ}{\pi} \right) = -427.5^\circ$$

- 4) For each angle, find two coterminal angles in radians (one positive and one negative).

- a) $\frac{15\pi}{8}$
b) $-\frac{5\pi}{4}$

$$(a) \frac{15\pi}{8} - 2\pi = -\frac{\pi}{8}$$

$$\frac{15\pi}{8} + 2\pi = \frac{31\pi}{8}$$

$$(b) -\frac{5\pi}{4} - 2\pi = -\frac{13\pi}{4}$$

$$-\frac{5\pi}{4} + 2\pi = \frac{3\pi}{4}$$