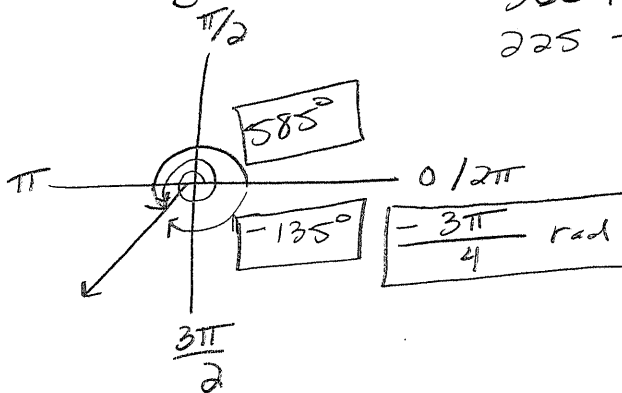


## FST Trig 2.1 Warm up

1) Sketch an angle in its standard position and find the degree measure of the two nearest angles (one negative and one positive that are co-terminal to the given angle.

$$\frac{5\pi}{4} \text{ radians}$$

$$\frac{5(180)}{4} = 225^\circ$$



2) Which is larger: an angle of degree measure 150 or an angle measure of radian measure of 2? Show work to support your answer.

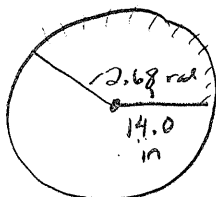
$$\frac{2 \text{ rad}}{\pi} = \frac{x}{180}$$

$$\frac{2(180)}{\pi} = \frac{\pi x}{\pi}$$

$$x = 114.6^\circ < 150^\circ$$

$$150^\circ > 2 \text{ rad}$$

3) In a circle of radius 14.0 in., find the length of the arc subtended by a central angle of 2.68 rad.



$$\frac{x}{2\pi(14.0)} = \frac{2.68}{2\pi}$$

$$\frac{2\pi(14.0)(2.68)}{2\pi} = \frac{2\pi x}{2\pi}$$

$$x = 37.5 \text{ in}$$