

What is the formula for the circumference of a circle?

$$C = 2\pi r$$

How many degrees/radians is a *unit circle*?

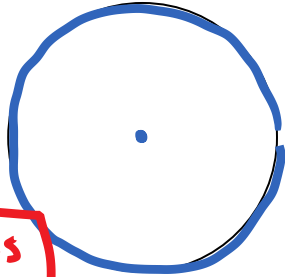
$$r = 1$$

$$C = 2\pi r$$

$$C = 2\pi(1)$$

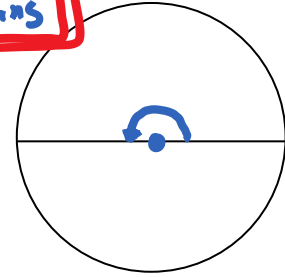
$$C = 2\pi$$

$$360^\circ = 2\pi \text{ radians}$$



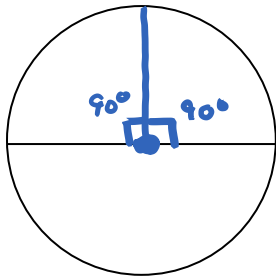
How many degrees/radians is a *semi-circle*?

$$180^\circ = \pi \text{ radians}$$



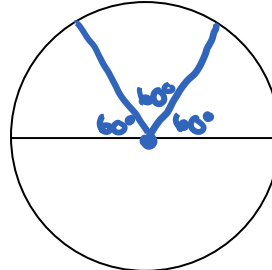
How many degrees/radians is each section of a *semi-circle* when it is cut into –

2 sections



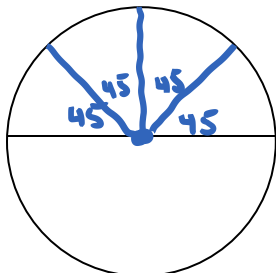
$$90^\circ = \frac{\pi}{2} \text{ radians}$$

3 sections



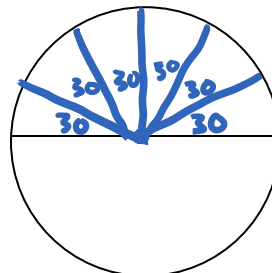
$$60^\circ = \frac{\pi}{3} \text{ radians}$$

4 sections



$$45^\circ = \frac{\pi}{4} \text{ radians}$$

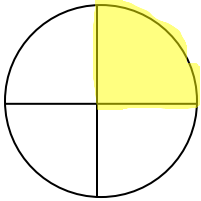
6 sections



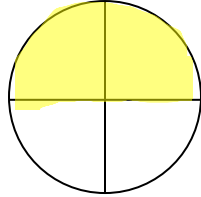
$$30^\circ = \frac{\pi}{6} \text{ radians}$$

Sketch each angle on the circle.

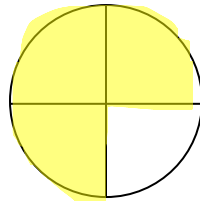
$$\frac{\pi}{2} = 90^\circ$$



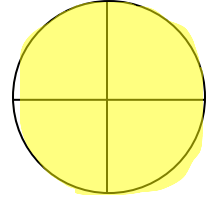
$$\frac{2\pi}{2} = \pi = 180^\circ$$



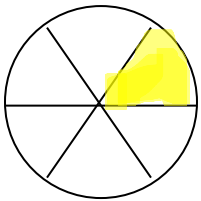
$$\frac{3\pi}{2} = 270^\circ$$



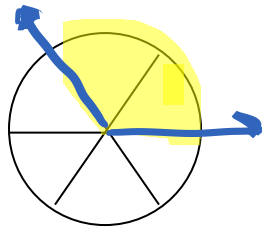
$$\frac{4\pi}{2} = 2\pi = 360^\circ$$



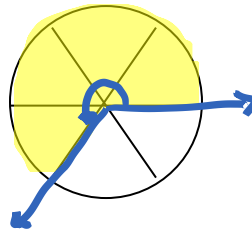
$$\frac{\pi}{3} = 60^\circ$$



$$\frac{2\pi}{3} = 120^\circ$$

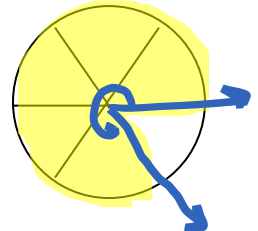


$$\frac{4\pi}{3} = 240^\circ$$

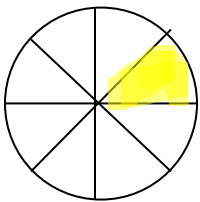


$$\frac{5\pi}{3} = 300^\circ$$

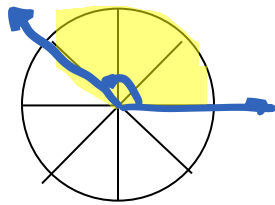
$5(60^\circ)$



$$\frac{\pi}{4} = 45^\circ$$

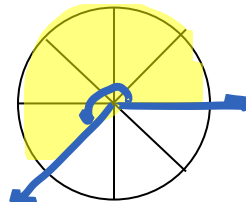


$$\frac{3\pi}{4} = 135^\circ$$

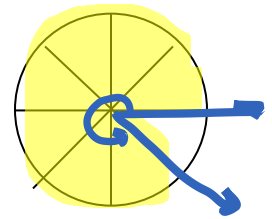


$$\frac{5\pi}{4} = 5(45^\circ)$$

$225^\circ$

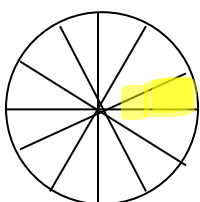


$$\frac{7\pi}{4} = 315^\circ$$



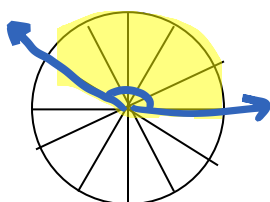
$$\frac{\pi}{6} = 30^\circ$$

$30^\circ$

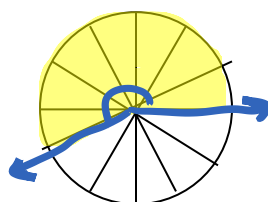


$$\frac{5\pi}{6} = 5(30^\circ)$$

$150^\circ$



$$\frac{7\pi}{6} = 210^\circ$$



$$\frac{11\pi}{6} = 330^\circ$$

