

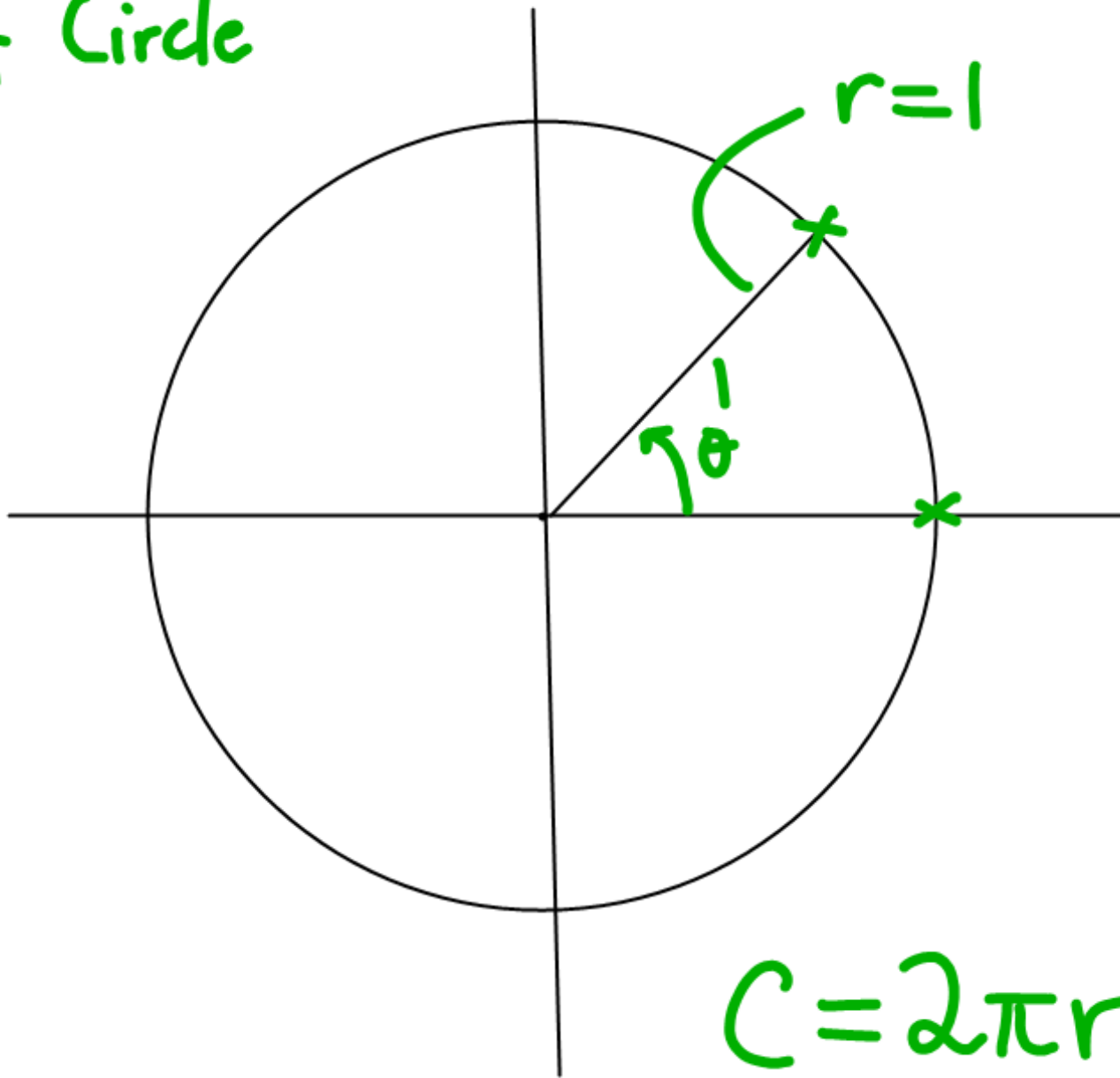
9/3 -- Accelerated Math 3

Another way to Measure Angles

What is a radian?

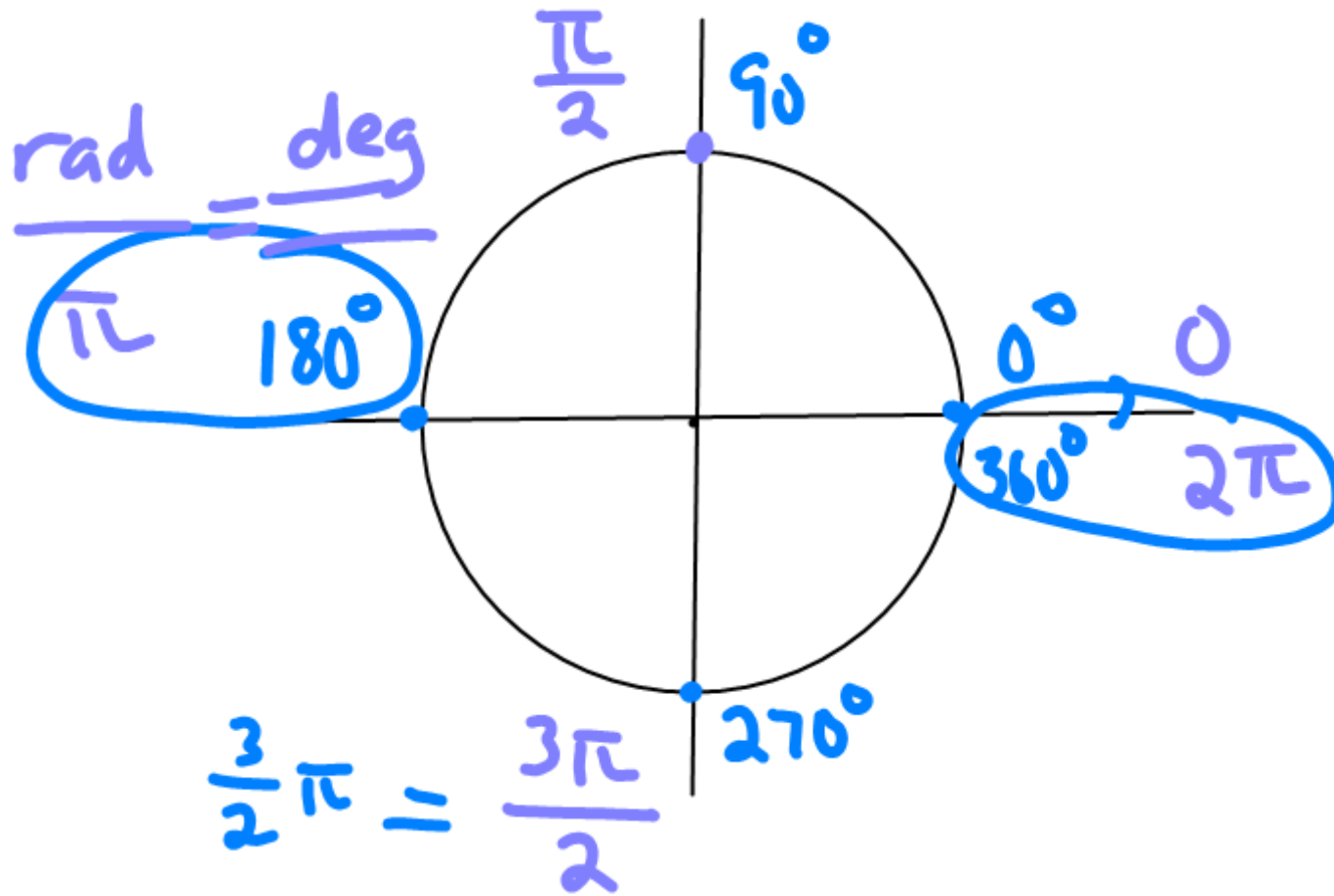
How do I convert from degrees to radians and vice versa?

Unit Circle



$$C = 2\pi r$$

$$C = 2\pi$$



rad = radians

deg = degrees

$$\frac{\text{rad}}{2\pi} = \frac{\text{deg}}{360}$$

$$\frac{\text{rad}}{\pi} = \frac{\text{deg}}{180^\circ}$$

What is 30° in radians?

$$\frac{\text{deg}}{180} = \frac{\text{rad}}{\pi}$$

$$\frac{30}{180} = \frac{\text{rad}}{\pi}$$

$$\pi \cdot \frac{1}{6} = \frac{\text{rad}}{\cancel{\pi}} \cdot \cancel{\pi}$$

$$\frac{\pi}{6} = \text{rad} \approx 0.523$$

30°	$\frac{\pi}{6}$.52
45°	$\sin\left(\frac{\pi}{4}\right) = \frac{1}{\sqrt{2}}$.79
60°	$\sin\left(\frac{\pi}{3}\right) = \frac{\sqrt{3}}{2}$	1.047
90°	$\frac{\pi}{2}$	1.57

P. 116 #3-33, 39-47 (odd)