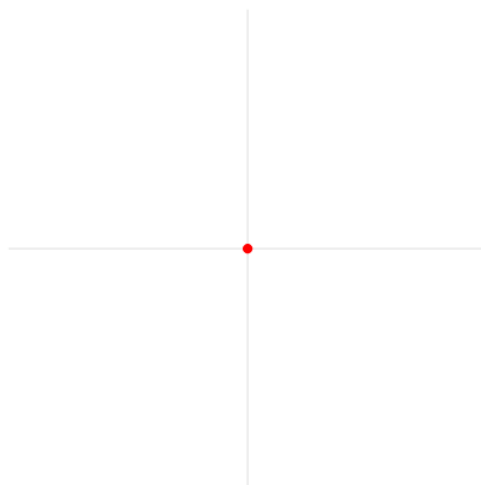


1.5 RADIANs

ESSENTIAL QUESTION:

How do I graph angles given in radians?



RADIANS

ESSENTIAL

QUESTION

How do I graph angles given in radians?

coterminal angles... end @ same place
 $\pm 360^\circ$ now $\pm 2\pi$



ex. $\frac{\pi}{6} + \frac{12 \cdot 2\pi}{6} = \boxed{\frac{13\pi}{6}}$ OR $\frac{\pi}{6} - \frac{12\pi}{6} = \boxed{\frac{-11\pi}{6}}$

common denominator

RADIANS

ESSENTIAL

QUESTION:

How do I graph angles given in radians?

Convert degrees to radians

$$1^\circ = \frac{\pi}{180}$$

$$\frac{180^\circ}{360^\circ} = \frac{\pi}{2\pi}$$

$$\frac{180}{180} = \frac{\pi}{180}$$

$$90^\circ \Rightarrow 90 \cdot \frac{\pi}{180} = \frac{\pi}{2}$$

$$\text{Degree} \times \frac{\pi}{180}$$

Convert radians to degrees

$$\frac{\pi}{\pi} = \frac{180}{180}$$

$$1 \text{ radian} = \frac{180}{\pi}$$

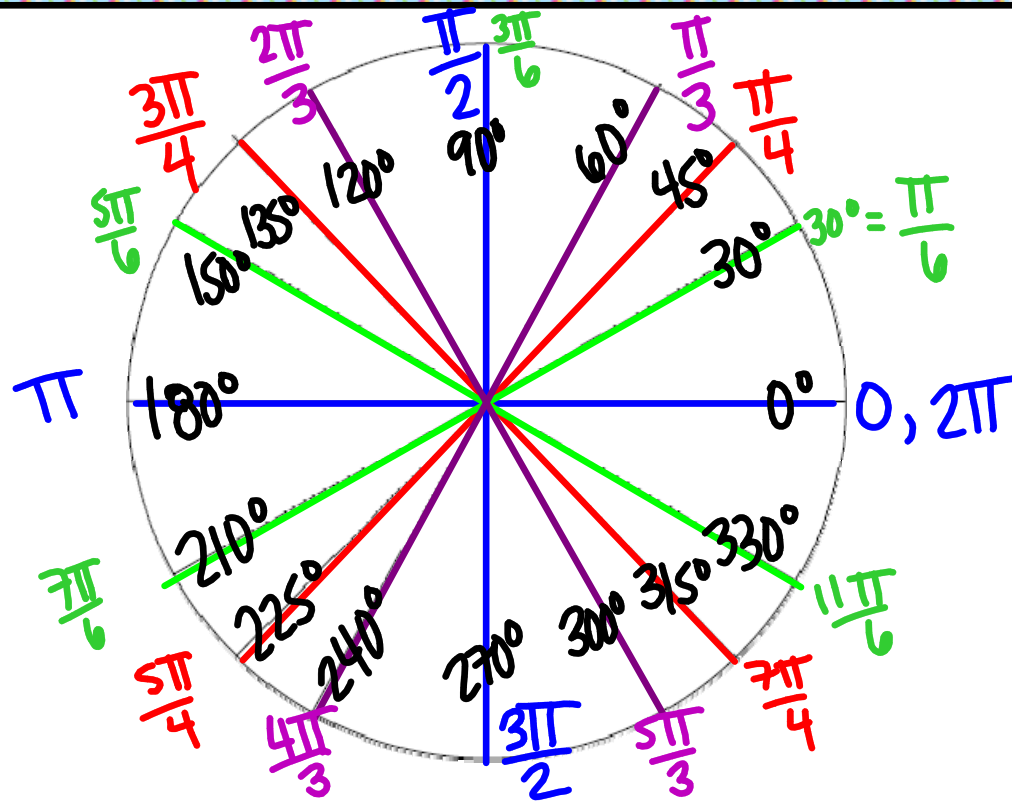
$$\text{Radian} \times \frac{180}{\pi}$$

(57.296...)

$$\text{ex. } \frac{\pi}{6} \Rightarrow \frac{\pi}{6} \cdot \frac{180}{\pi} = 30^\circ$$

UNIT CIRCLE

Radius = 1

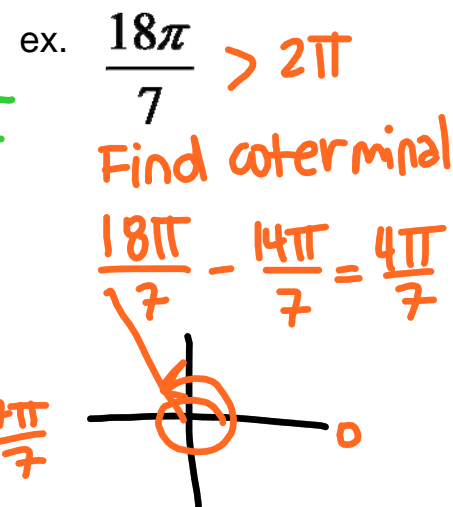
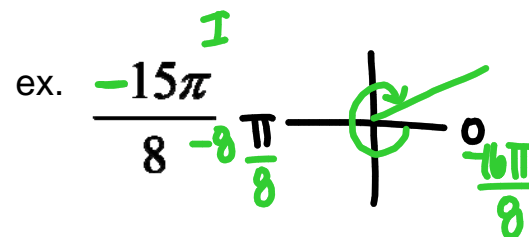
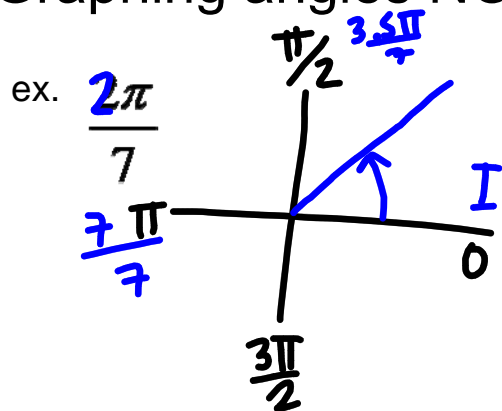


RADIANS

ESSENTIAL
QUESTION:

How do I graph angles given in radians?

Graphing angles NOT on the unit circle



RADIANS

ESSENTIAL
QUESTION:

How do I graph angles given in radians?

