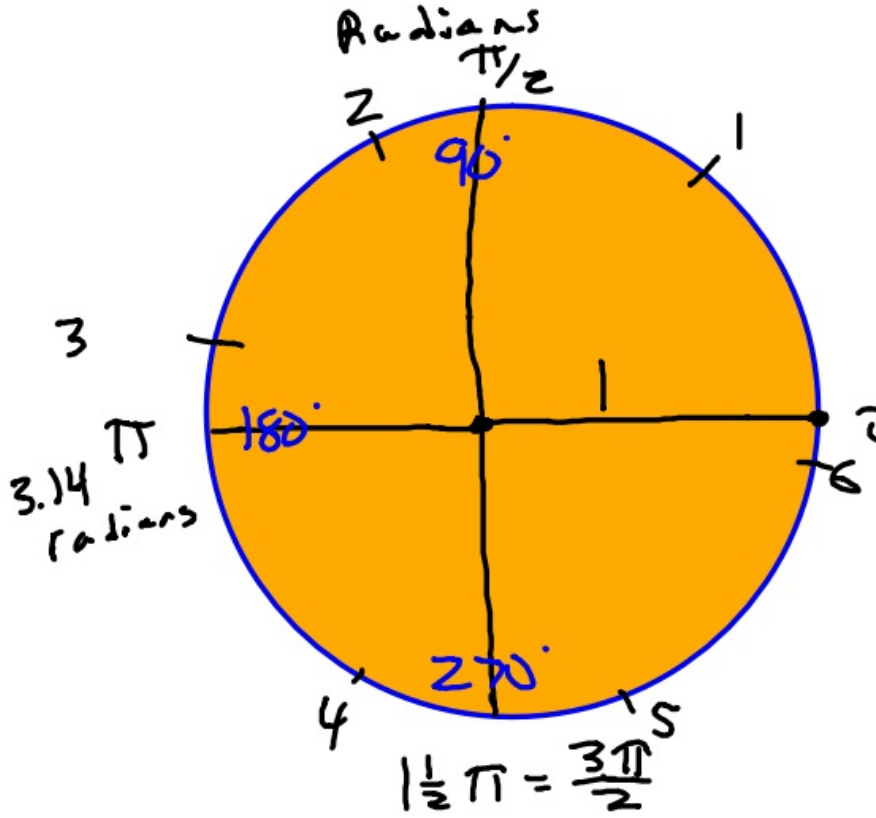
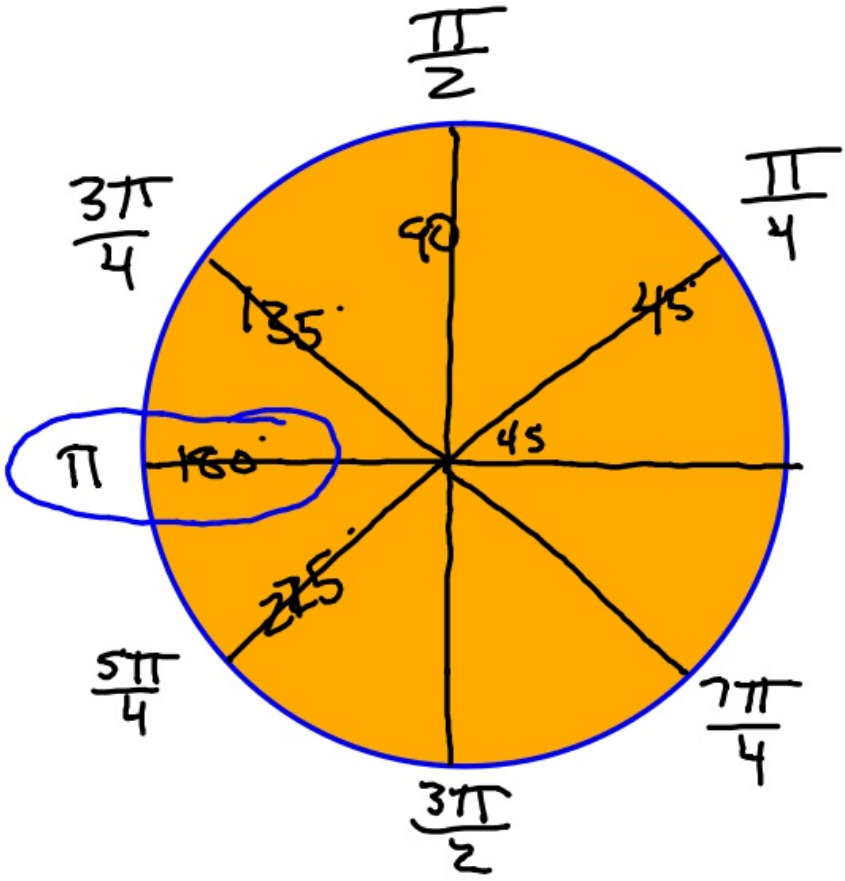
2-12-18 1st Trig



$C = \pi \cdot d$

$C = \pi \cdot 2$



① Convert 60° to radians.

$$\frac{\cancel{60}^{1}}{} \cdot \frac{\pi}{\cancel{180}^{3}} = \frac{\pi}{3}$$

② Convert 120° to radians.

$$\frac{\cancel{120}^{2}}{1} \cdot \frac{\pi}{\cancel{180}^{3}} = \frac{2\pi}{3}$$

③ Convert 140° to radians.

$$\frac{\cancel{140}^{7}}{1} \cdot \frac{\pi}{\cancel{180}^{9}} = \frac{7\pi}{9}$$

④ Convert $\frac{\pi}{6}$ to degrees.

$$\frac{\cancel{\pi}}{6} \cdot \frac{180^\circ}{\cancel{\pi}} = \frac{180^\circ}{6} = 30^\circ$$

⑤ Convert $\frac{\pi}{10}$ to degrees.

$$\frac{\cancel{\pi}}{10} \cdot \frac{180^{\circ}}{\cancel{\pi}} = \frac{180}{10} = 18^\circ$$

(6) Convert 240° to radians.

$$\frac{240^\circ}{1} \cdot \frac{\pi}{180^\circ} \quad \frac{4\pi}{3}$$

(7) Convert 2 radians to degrees.

$$\frac{2}{1} \cdot \frac{180^\circ}{\pi} = \frac{360}{\pi} \approx 114.6^\circ$$

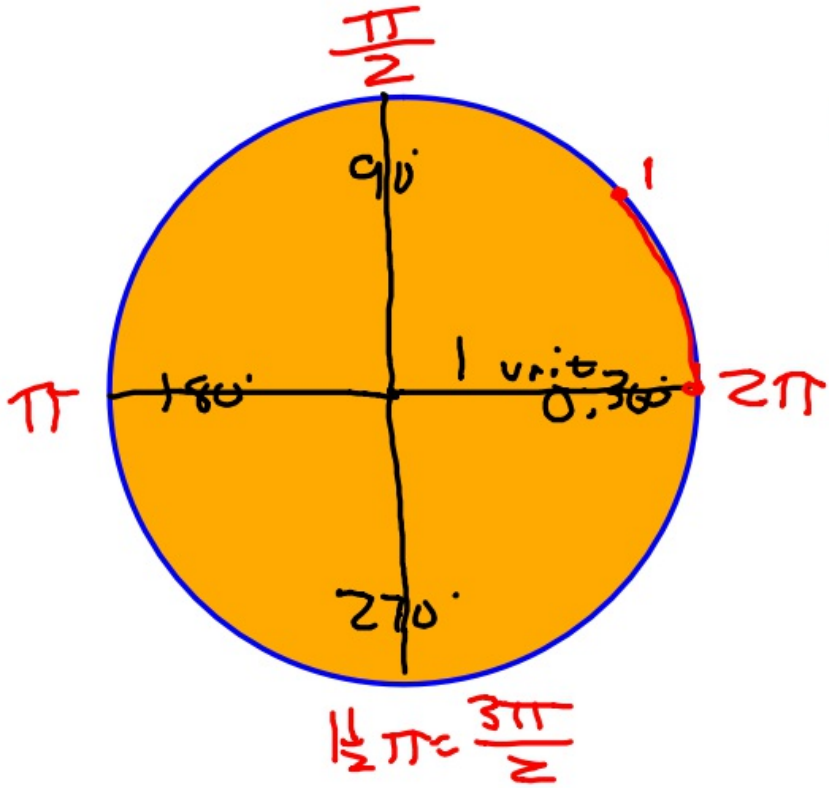
(8) Convert 3 radians to degrees.

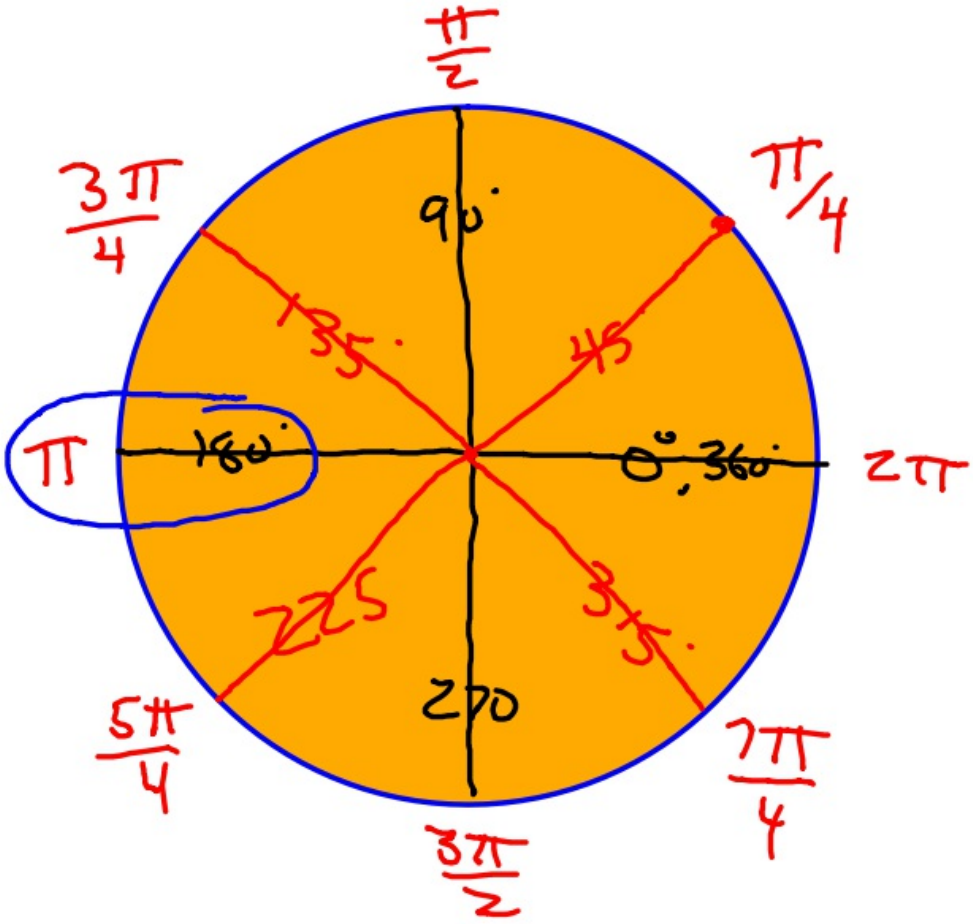
$$\frac{3}{1} \cdot \frac{180^\circ}{\pi} = \frac{540}{\pi} \approx 171.9^\circ$$

(9) Convert 40' to radians.

$$\frac{40'}{!} \cdot \frac{\pi}{180'} = \frac{2\pi}{9}$$

2-12-18 3rd Trig





① Convert 60° to radians.

$$60^\circ \cdot \frac{\pi}{180^\circ} = \frac{60\pi}{180} = \frac{\pi}{3}$$

② Convert 100° to radians.

$$\frac{100^\circ}{1} \cdot \frac{\pi}{180^\circ} \quad \frac{5\pi}{9}$$

③ Convert 40° to radians.

$$\frac{40^\circ}{1} \cdot \frac{\pi}{180^\circ} = \frac{2\pi}{9}$$

④ Convert $\frac{3\pi}{5}$ to degrees.

$$\frac{3\pi}{5} \cdot \frac{180^\circ}{\pi} = \frac{540^\circ}{5} = 108^\circ$$

⑤ Convert $\frac{\pi}{9}$ to degrees.

$$\frac{\pi}{9} \cdot \frac{180^\circ}{\pi} = \frac{180^\circ}{9} = 20^\circ$$

(6) Convert 10° to radians.

$$\frac{10}{1} \cdot \frac{\pi}{180} = \frac{\pi}{18}$$

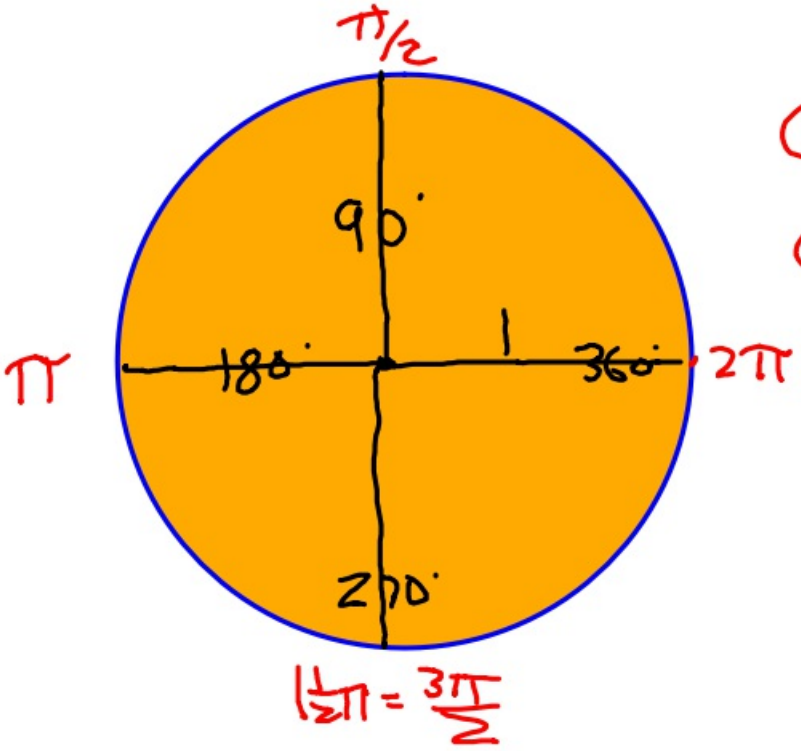
(7) Convert 2 radians to degrees.

$$\frac{2}{1} \cdot \frac{180}{\pi} = \frac{360}{\pi} \approx 114.6^\circ$$

(8) Convert 3 radians to degrees.

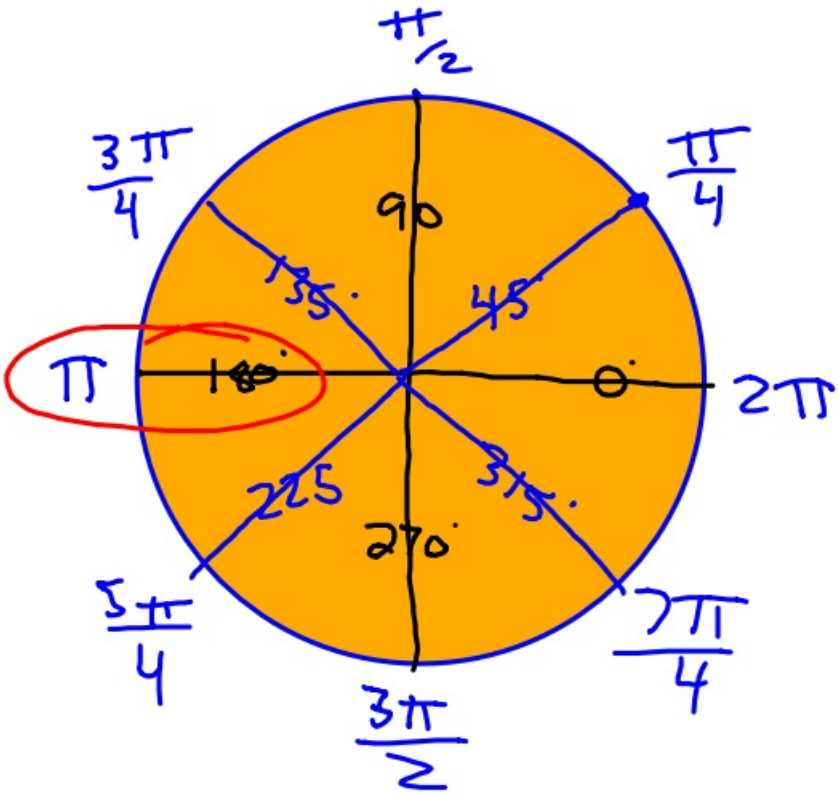
$$\frac{3}{1} \cdot \frac{180}{\pi} = \frac{540}{\pi} \approx 171.9^\circ$$

2-12-18 4Ta Trig



$C = \pi \cdot d$

$C = 2\pi$



(1) Convert 60° to radians.

$$60^\circ \cdot \frac{\pi}{180^\circ} = \frac{60\pi}{180} = \frac{\pi}{3}$$

(2) Convert 100° to radians.

$$100^\circ \cdot \frac{\pi}{180^\circ} \quad \frac{100\pi}{180} = \frac{5\pi}{9}$$

(3) Convert $\frac{\pi}{9}$ to degrees.

$$\frac{\pi}{9} \cdot \frac{180^\circ}{\pi} = \frac{180^\circ}{9} = 20^\circ$$

(4) Convert $\frac{2\pi}{5}$ into degrees.

$$\frac{2\pi}{5} \cdot \frac{180^\circ}{\pi} = \frac{360}{5} = 72^\circ$$

(5) Convert 120° to radians

$$\frac{120^\circ}{1} \cdot \frac{\pi}{180^\circ} = \frac{120\pi}{180} = \frac{2\pi}{3}$$

(6) Convert 2 radians to degrees.

$$2 \cdot \frac{180^\circ}{\pi} = \frac{360}{\pi} \approx 114.6^\circ$$