

WELCOME TO TRIGONOMETRY

Degrees $1^\circ = 60'$
 $1' = 60''$

$37.63^\circ \rightarrow \text{DMS}$

Triangle Measure

$$\begin{array}{r} 32^\circ 40' 51'' \\ + 13^\circ 24' 11'' \\ \hline \end{array}$$

$$45^\circ 64' \cancel{62''}$$

$$\cancel{65'} \quad 2''$$

$$46^\circ 5' 2''$$

Find the complement of

$$37^\circ 29'$$

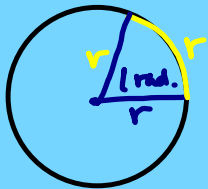
$$89^\circ 60'$$

$$\underline{90^\circ 00'}$$

$$- 37^\circ 29'$$

$$\hline 52^\circ 31'$$

RADIANS



$$\frac{360^\circ}{2\pi r} = \frac{1 \text{ rad}}{r}$$

$$\frac{360^\circ}{2r} = \frac{2\pi \text{ rad}}{2r}$$

$$\boxed{180^\circ = \pi \text{ rad}}$$

$$57.3^\circ = 1 \text{ rad}$$

Convert 100° to rads

$$100^\circ \cdot \frac{\pi \text{ rad}}{180^\circ} = \frac{100\pi}{180}$$

$$= \frac{5\pi}{9}$$

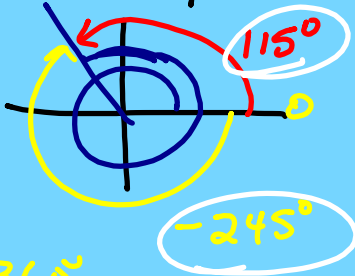
$$\frac{\text{Deg} \rightarrow \text{Rads}}{\times \frac{\pi}{180^\circ}}$$

$$\frac{\text{Rads} \rightarrow \text{Degs}}{\times \frac{180^\circ}{\pi}}$$

$$\frac{11\pi}{6} \text{ to deg}$$

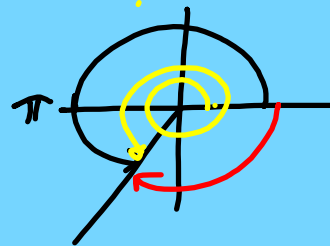
$$\frac{11\pi}{6} \cdot \frac{180^\circ}{\pi} = 330^\circ$$

Coterminal angles
 475°



$$\begin{array}{r} 360^\circ \\ - 115^\circ \\ \hline 245^\circ \end{array}$$

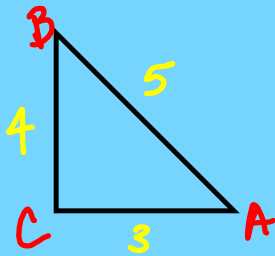
$$\frac{7\pi}{5} = 1\frac{2}{5}\pi$$



$$360^\circ = 2\pi_{\text{rad}}$$

$$\begin{aligned} 2\pi + \frac{7\pi}{5} &= \frac{10\pi}{5} + \frac{7\pi}{5} \\ &= \boxed{\frac{17\pi}{5}} \end{aligned}$$

$$2\pi - \frac{7\pi}{5} = \frac{10\pi}{5} - \frac{7\pi}{5} = \boxed{\frac{3\pi}{5}}$$



$$\sin A = \frac{o}{h}$$

$$\cos A = \frac{a}{h}$$

$$\tan A = \frac{o}{a}$$

soh cah toa

$$\cos A = \frac{3}{5}$$

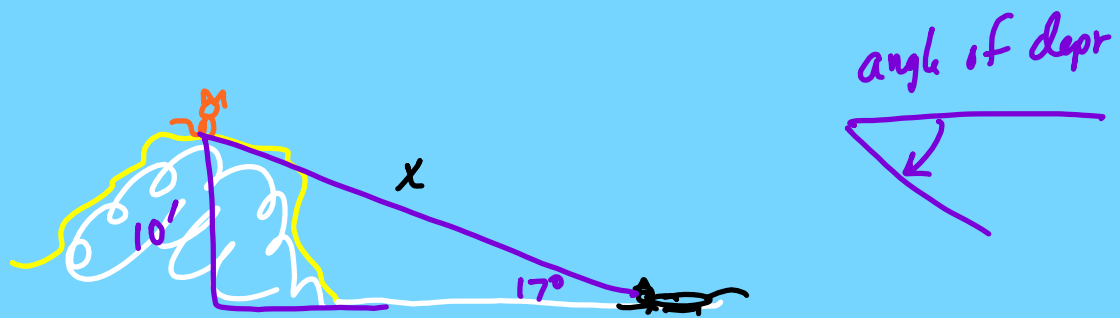
$$\csc A = \frac{h}{o}$$

$$\sec A = \frac{h}{a}$$

$$\cot A = \frac{a}{o}$$

$$\cot B = \frac{\text{adj}}{\text{opp}}$$

$$= \frac{4}{3}$$



$$x \cdot \sin 17^\circ = \frac{10}{x} *$$

$$x \cdot \sin 17^\circ = 10$$

$$x = \frac{10}{\sin 17^\circ}$$

$$\sin A = \frac{10}{17}$$

$$\sin^{-1}(10/17)$$