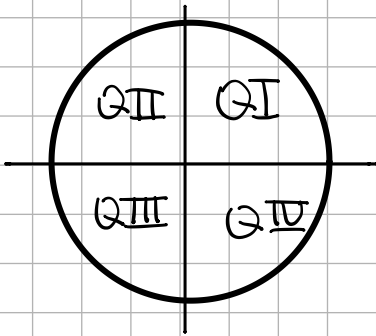


Name: _____ Date: 9/25/25

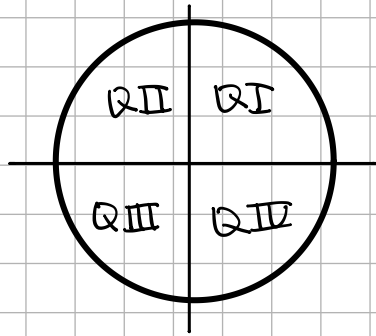
Session 6 : A unit circle is very helpful tool to use for this worksheet! :)

Warm up: Circle or highlight the quadrants we use to evaluate each inverse trig function

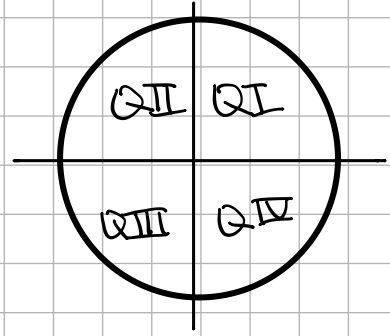
$\sin^{-1}(x)$



$\cos^{-1}(x)$



$\tan^{-1}(x)$



Evaluate the following inverse functions

$$\sin^{-1}\left(\frac{1}{2}\right)$$

$$\sin^{-1}\left(\sin \frac{\pi}{4}\right)$$

$$\tan^{-1}(-\sqrt{3})$$

$$\cos^{-1}\left(\cos\left(\frac{5\pi}{3}\right)\right)$$

Find the amplitude and periods of the functions below

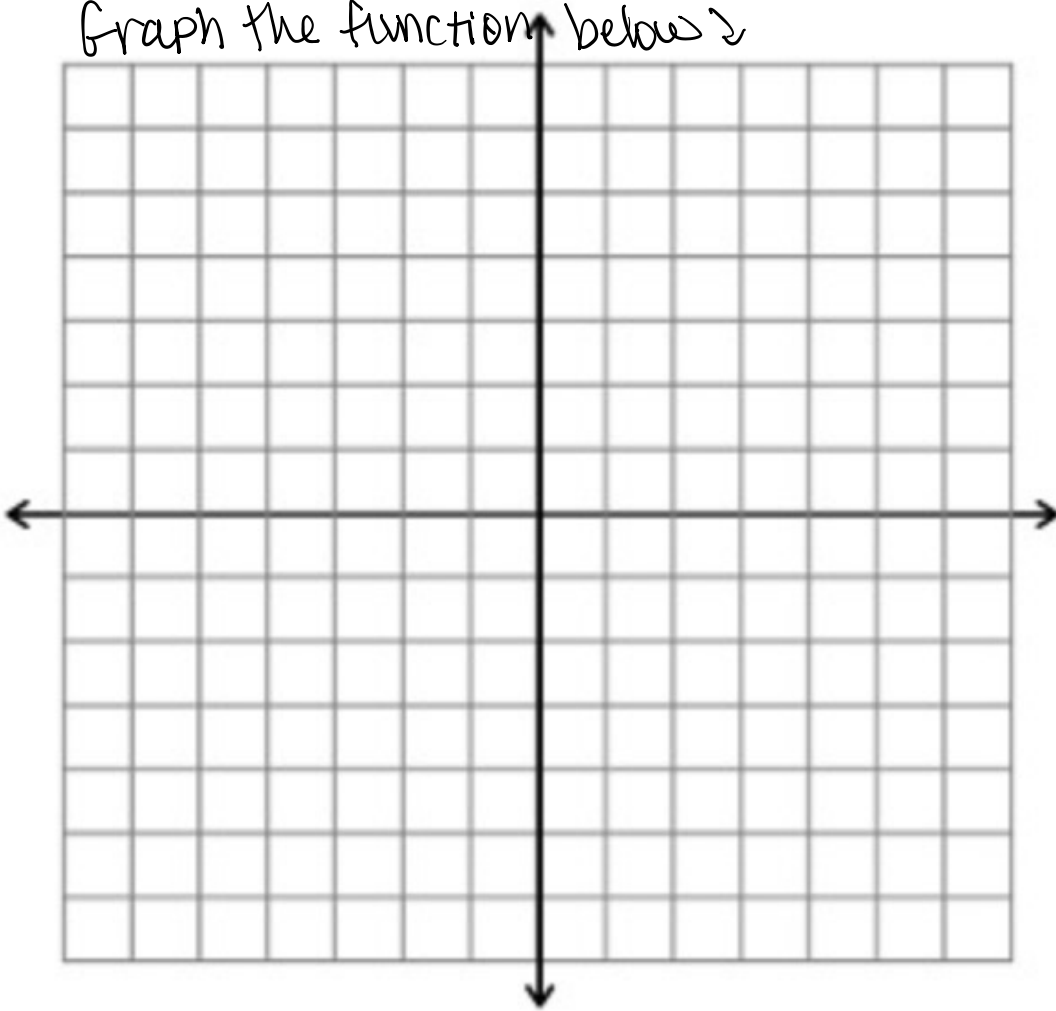
$$y = \cos 2x$$

$$y = 3 \sin 2\pi x$$

Find the horizontal shift of the functions below

$$y = \cos\left(x - \frac{\pi}{2}\right)$$

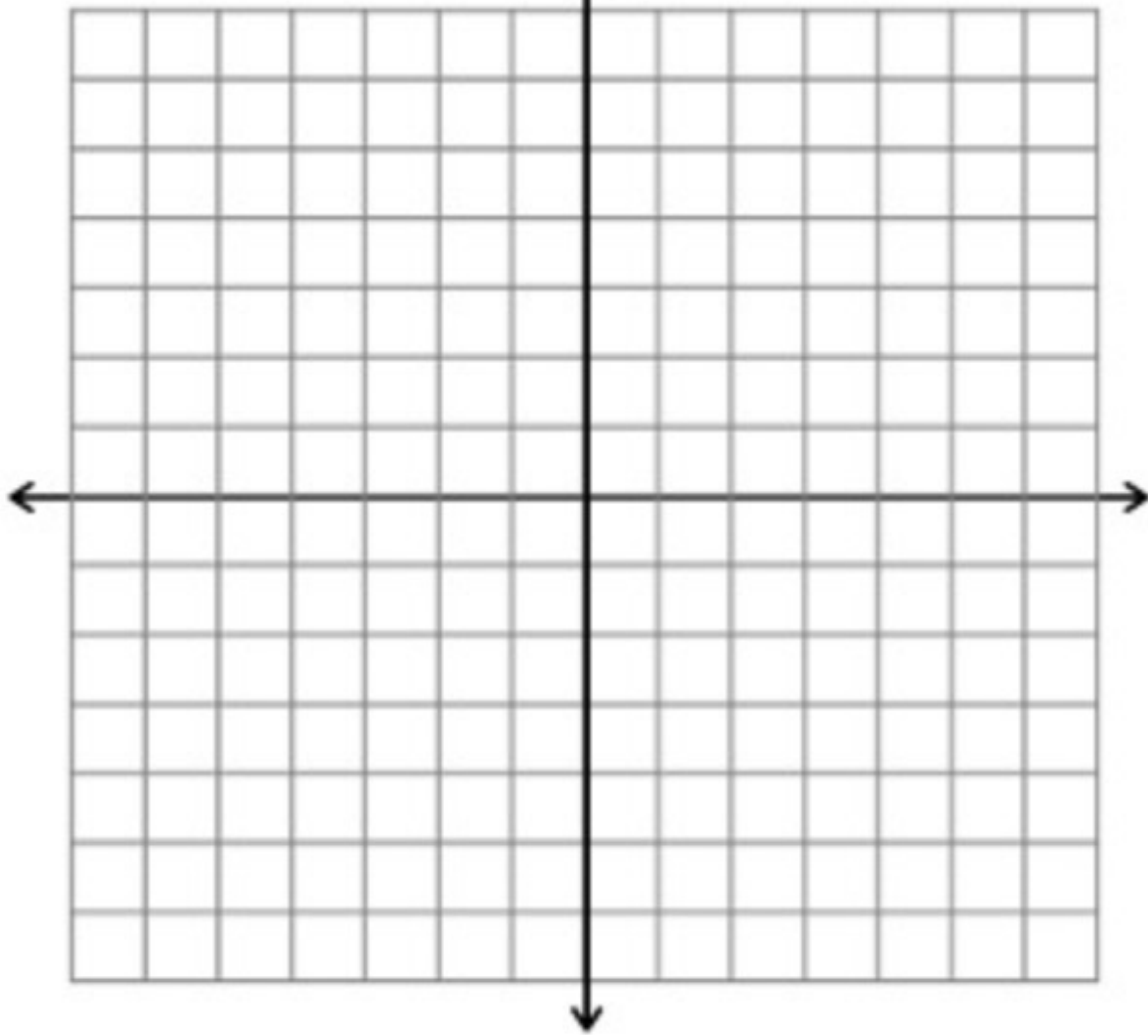
Graph the function below:



$$y = 2 \sin\left(\frac{2}{3}x - \frac{\pi}{6}\right)$$

hint: find amplitude, period, and horizontal shift

Graph the function below ↴



$$y = -2 \tan\left(2x - \frac{\pi}{3}\right)$$

hint: find amplitude, period, and horizontal shift