

Write the function that represents the graph.

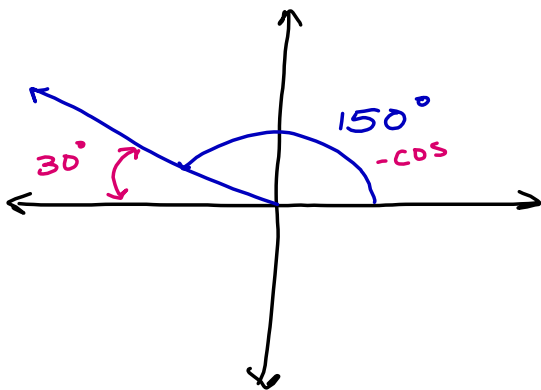
parent function $y = \sqrt{x}$

$$y = \sqrt{x+4} + 1$$

State the Domain and Range:

D: $\{x | x \geq -4\}$
 R: $\{f(x) | f(x) \geq 1\}$

$\cos(150^\circ)$



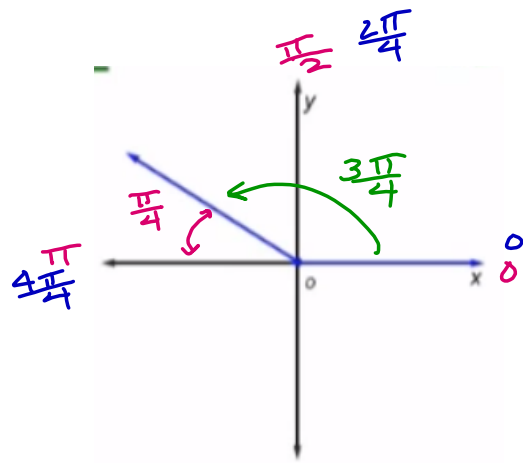
$$\cos(150^\circ) = -\cos(30^\circ)$$

$$\cos(150^\circ) = -\frac{\sqrt{3}}{2}$$

$$\tan\left(\frac{3\pi}{4}\right)$$

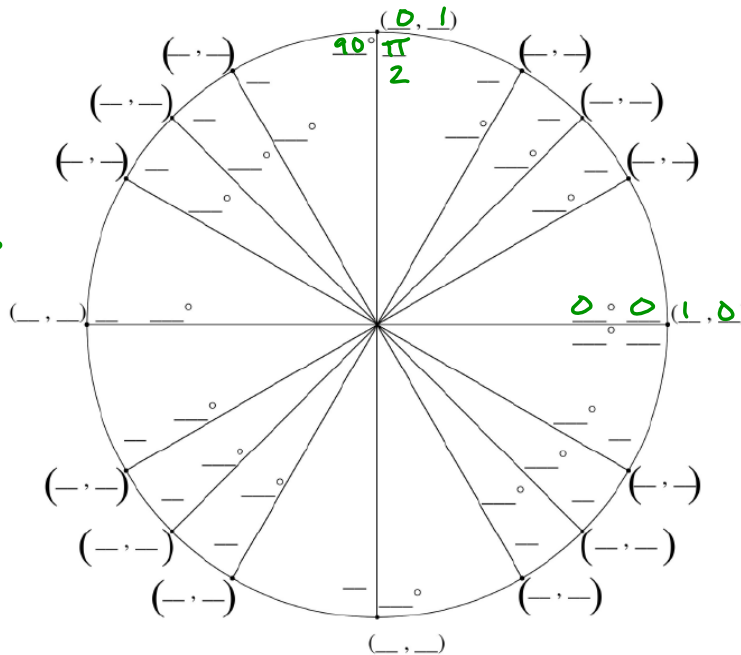
$$\tan\left(\frac{3\pi}{4}\right) = -\tan\left(\frac{\pi}{4}\right)$$

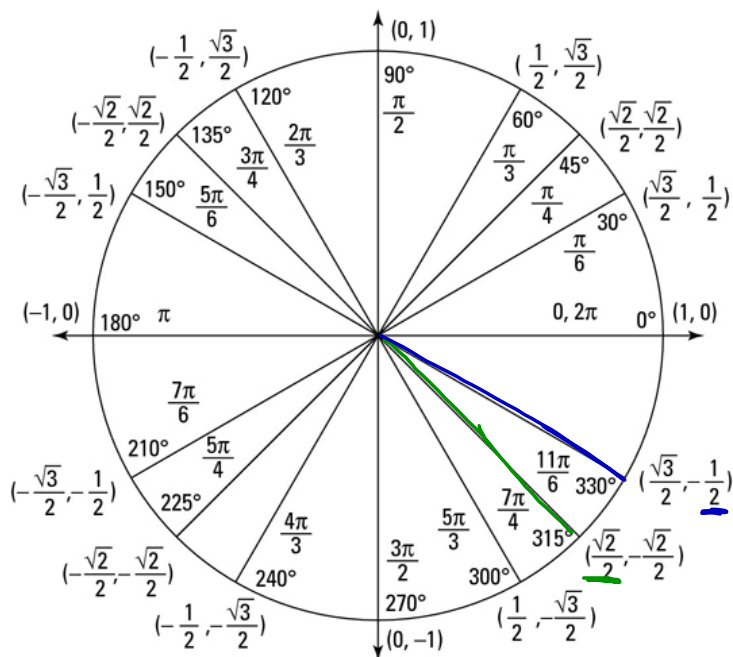
$$= -1$$



Use what you know so far, and your paper plate to fill in the unit circle:

Compare Trig Values With Coordinates





$$(\cos \theta, \sin \theta)$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta}$$

$$\cot \theta = \frac{\cos \theta}{\sin \theta}$$

$$\csc \theta = \frac{1}{\sin \theta}$$

$$\sec \theta = \frac{1}{\cos \theta}$$

Use the Unit Circle to find the exact value of each function:

$$0^\circ \rightarrow 360^\circ$$

$$\sin(-390^\circ)$$

$$-390 + 360 = -30$$

$$-30 + 360 = 330^\circ$$

$$\sin 330^\circ = -\frac{1}{2}$$

$$0 \rightarrow 2\pi \leftarrow \frac{8\pi}{4}$$

$$\cos\left(\frac{15\pi}{4}\right)$$

$$\frac{15\pi}{4} - \frac{8\pi}{4} = \frac{7\pi}{4}$$

$$\cos\left(\frac{15\pi}{4}\right) = \frac{\sqrt{2}}{2}$$