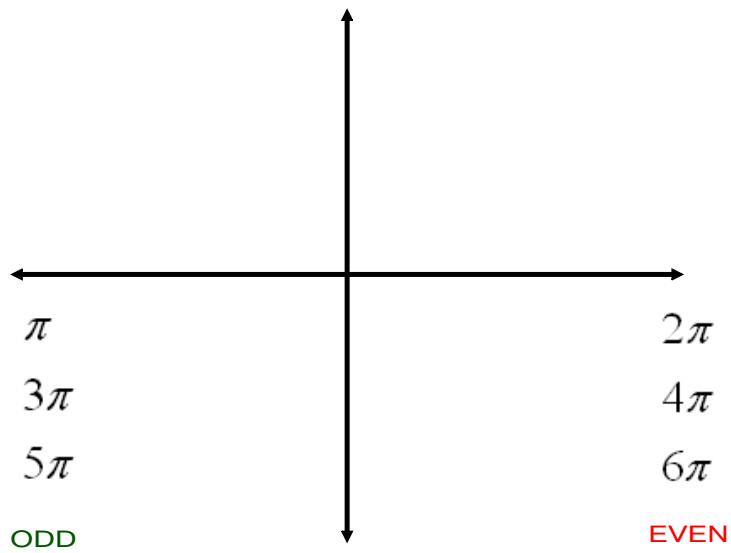
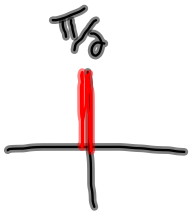


Remember!



$$-\frac{2\pi}{3} + \frac{2\pi}{1}$$

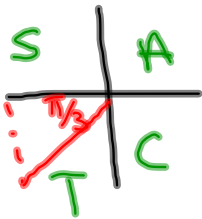
⑧ b)



$$\csc\left(\frac{2\pi}{4}\right) \sin\left(-\frac{2\pi}{3}\right) \cot\left(\frac{5\pi}{4}\right)$$

$$\csc\left(\frac{\pi}{2}\right) \sin\left(\frac{4\pi}{3}\right) \cot\left(\frac{5\pi}{4}\right)$$

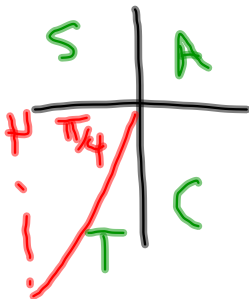
$$\frac{3\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$$



$$\left(\frac{1}{1}\right) \left(\frac{-\sqrt{3}}{2}\right) \left(+\frac{1}{1}\right)$$

$$\boxed{\frac{-\sqrt{3}}{2}}$$

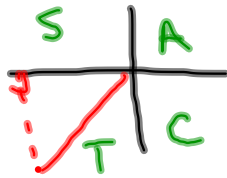
$$\frac{4\pi}{4}, \frac{5\pi}{4}, \frac{6\pi}{4}$$



Warm Up

Evaluate without the use of a calculator:

$$\frac{15\pi}{3}, \frac{16\pi}{3}, \frac{17\pi}{3}$$



$$\cos\left(\frac{16\pi}{3}\right) \tan^2\left(\frac{23\pi}{6}\right) + \csc\left(\frac{11\pi}{2}\right) + \sin^2\left(\frac{27\pi}{4}\right)$$

$$\left(-\frac{1}{2}\right) \left(\frac{1}{\sqrt{3}}\right)^2 + (-1) + \left(\frac{1}{\sqrt{2}}\right)^2$$

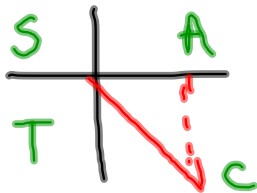
$$\left(-\frac{1}{2}\right) \left(\frac{1}{3}\right) - 1 + \left(\frac{1}{2}\right)$$

$$-\frac{1}{6} - \frac{6}{6} + \frac{3}{6}$$

$$-\frac{4}{6}$$

$$\boxed{-\frac{2}{3}}$$

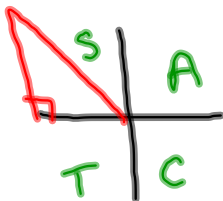
$$\frac{22\pi}{6}, \frac{23\pi}{6}, \frac{24\pi}{6}$$



$$\frac{10\pi}{2}, \frac{11\pi}{2}, \frac{12\pi}{2}$$



$$\frac{26\pi}{4}, \frac{27\pi}{4}, \frac{28\pi}{4}$$



Graph the following:

$$y = \underline{2} \cos(\theta + \underline{\frac{\pi}{2}}) + \underline{0}$$

$$(x, y) \rightarrow \left(\frac{x}{k} + C, Ay + D \right)$$

A = 2

$y = \cos \theta$

k = 1

C = $-\frac{\pi}{2}$

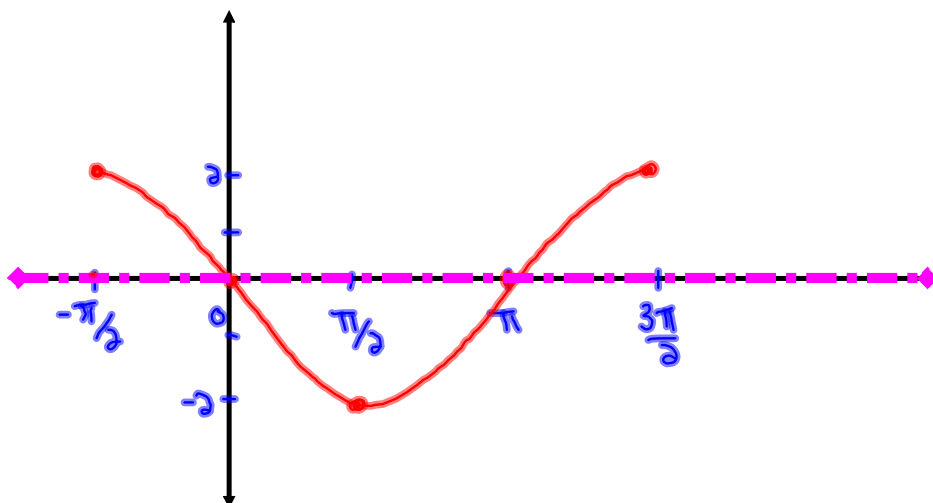
D = 0

P = 2π

θ	y
0	1
$\frac{\pi}{2}$	0
π	-1
$\frac{3\pi}{2}$	0
2π	1

New points after mapping

θ	y
$-\frac{\pi}{2}$	2
0	0
$\frac{\pi}{2}$	-2
$2\frac{\pi}{2} = \pi$	0
$3\frac{\pi}{2}$	2



Graph the following:

$$P = \frac{2\pi}{k} = \frac{2\pi}{1} = 2\pi$$

$$y = \underline{2} \sin\left(x - \frac{\pi}{\underline{4}}\right) + \underline{1}$$

$$(x, y) \rightarrow \left(\frac{x}{k} + C, Ay + D\right)$$

$$A = 2$$

$$y = \sin \theta$$

$$k = 1$$

$$C = \frac{\pi}{4}$$

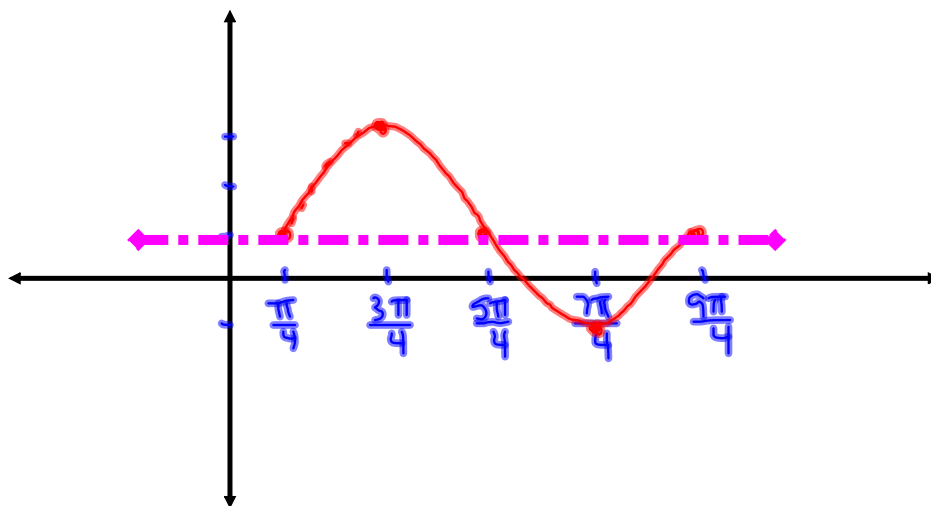
$$D = 1$$

$$P = 2\pi$$

θ	y
0	0
$\frac{\pi}{2}$	1
π	0
$\frac{3\pi}{2}$	-1
2π	0

New points after mapping

θ	y
$\frac{\pi}{4}$	1
$\frac{3\pi}{4}$	3
$\frac{5\pi}{4}$	1
$\frac{7\pi}{4}$	-1
$\frac{9\pi}{4}$	1



Homework
Finish worksheet