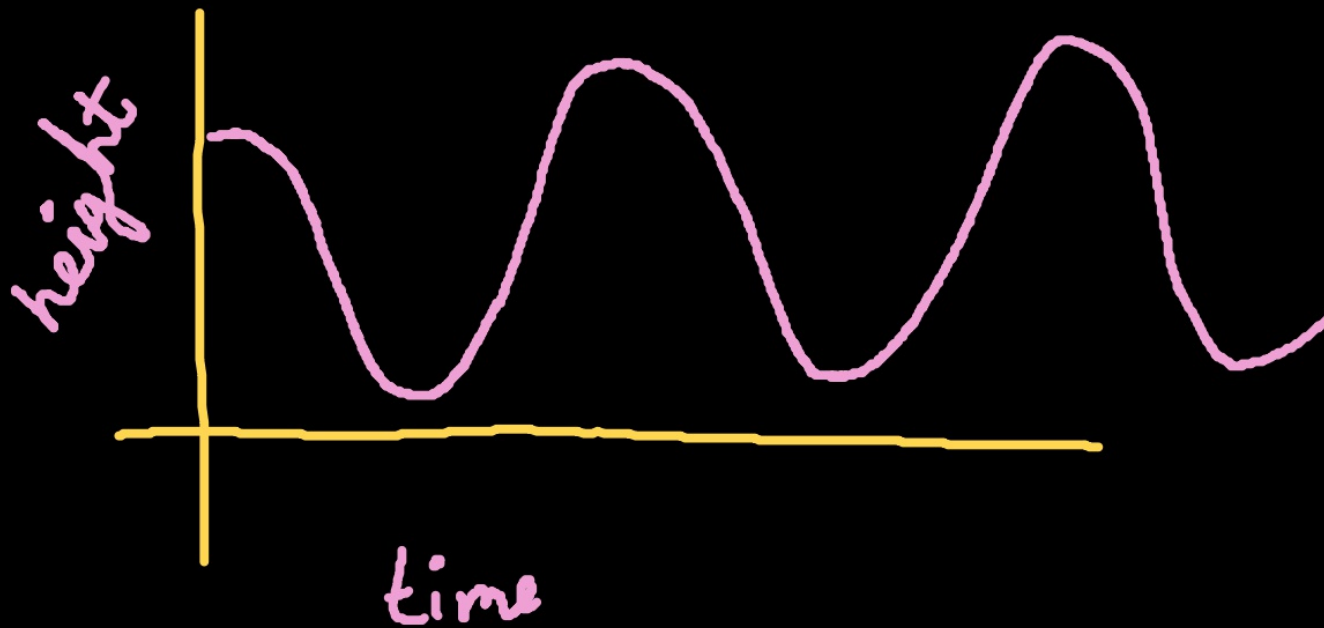


Anyone up for some trig squats?

It's leg day.



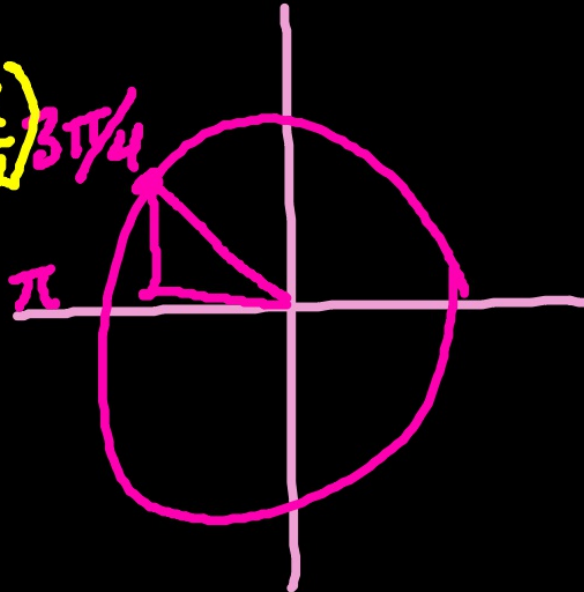
What is $\cos \frac{3\pi}{4}$?

↓
4
x-coord

cos sin
(x, y)

syn
siyn

↓
 $(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2})$ $3\pi/4$



Today's learning objective:

By the end of class, I will be able to graph trigonometric functions.

Today's language objective:

I will describe the terms amplitude and period to my peers.

amplitude

leading coefficient

$$\frac{\max - \min}{2} = \text{amp}$$

period

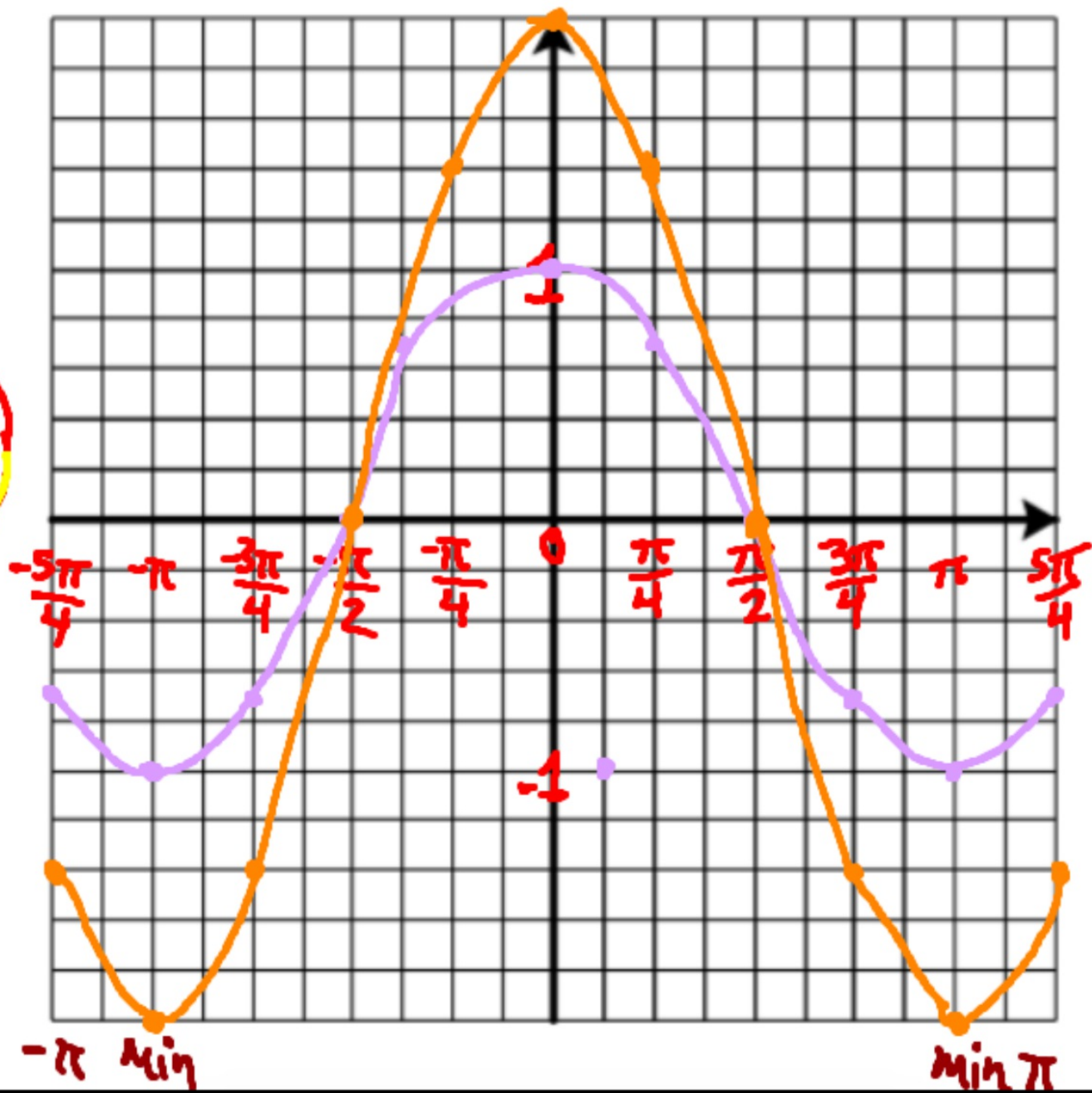
amount of rotation required to complete a cycle

$$f(x) = \cos x$$

$$g(x) = 2\cos(x)$$

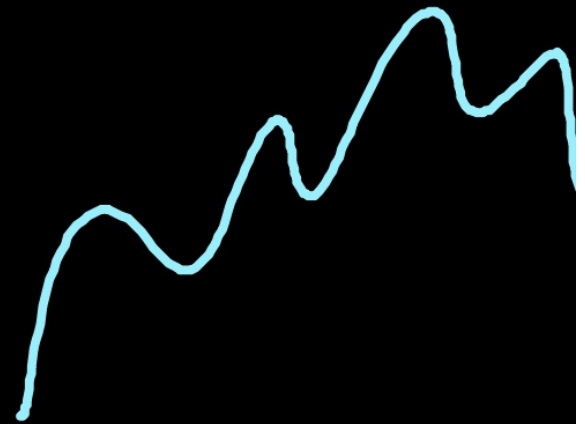
x	y
$-5\pi/4$	$-\sqrt{2}/2 = -.707$
$-\pi$	-1
$-3\pi/4$	$-\sqrt{2}/2$
$-\pi/2$	0
$-\pi/4$	$\sqrt{2}/2$
0	1
$\pi/4$	$\sqrt{2}/2$
$\pi/2$	0
$3\pi/4$	$-\sqrt{2}/2$
π	-1

x	y
$-5\pi/4$	$-\sqrt{2} = -1.414$
$-\pi$	-2
$-3\pi/4$	$-\sqrt{2}$
$-\pi/2$	0
$-\pi/4$	$\sqrt{2}$
0	2
$\pi/4$	$\sqrt{2}$
$\pi/2$	0
$3\pi/4$	$-\sqrt{2}$
π	-2
$5\pi/4$	$-\sqrt{2}$



$2 \cos(2x)$ period π

$2 \sin\left(\frac{x}{2}\right)$ period 4π



$$h(x) = \sin x$$

x	y
---	---

$$f(x) = \cos(x)$$

1 cycle = story's period

2 map/plot

$$\frac{\text{amplitude}}{\text{high-low}} = 2$$

period = 2π
amplitude = 1

