

DRILL

0 30 45 60 90
↑
SUT

① Find $\sin \theta$ & $\cos \theta$ for each angle:

I a) 30° $\sin 30^\circ = \frac{1}{2}$ $\cos 30^\circ = \frac{\sqrt{3}}{2}$

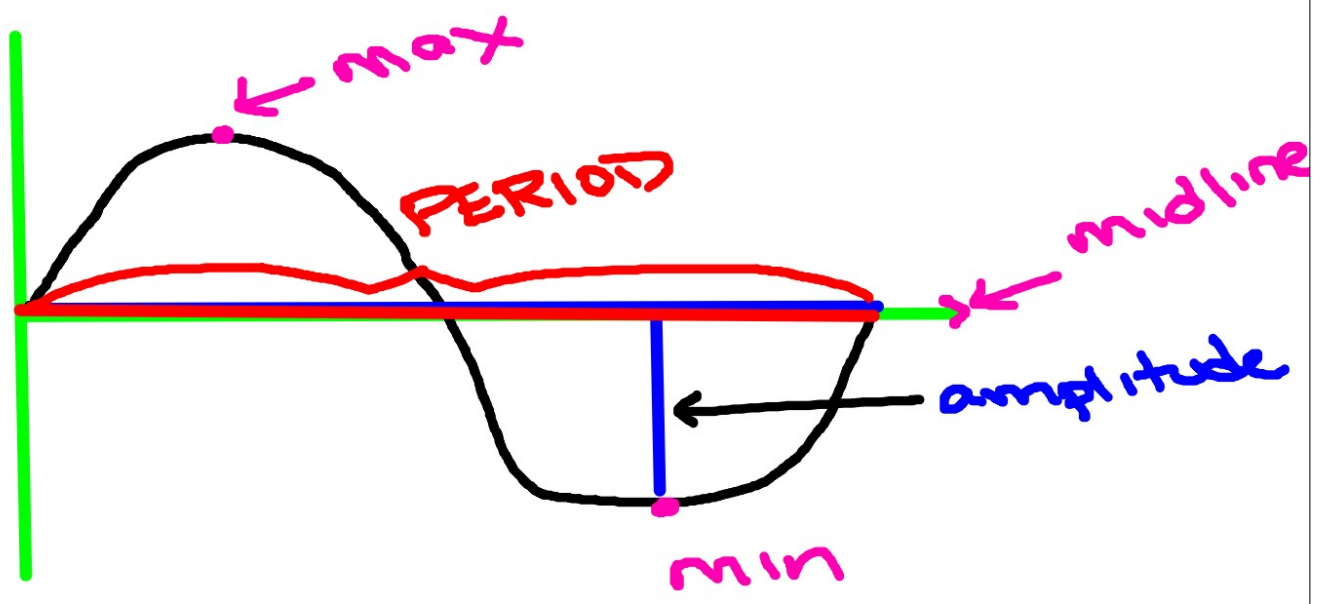
I b) $\frac{\pi}{4}$ $\sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}$ $\cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}$

c) $-\frac{5\pi}{6}$ $\sin -\frac{5\pi}{6} = -\frac{1}{2}$ $\cos -\frac{5\pi}{6} = -\frac{\sqrt{3}}{2}$

Review Transformations

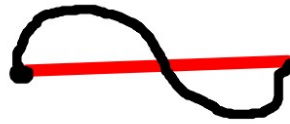
- $f(x) + c$ UP
- $f(x) - c$ DOWN
- $f(x + c)$ LEFT
- $f(x - c)$ RIGHT

"Sine" Function



$$f(x) = a \sin(x)$$

• If $a > 0$ "positive" graph starts by going up



• If $a < 0$ "negative" graph starts by going down.



$|a| = \text{amplitude}$