Honors PreCalculus Name KEY

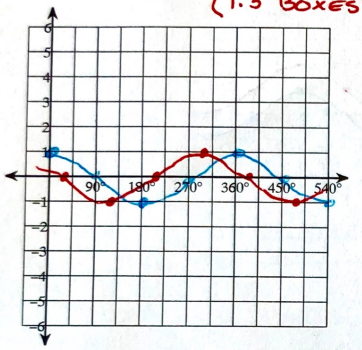
Sin & Cos - Vertical & Phase Shifts - NOTES

Date _____ Period ____

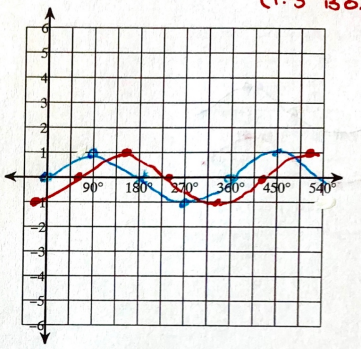
1) Phase Shift: A HORIZONTAL TRANSLATION (IN DEGREES OR RADIANS)

Graph each function using degrees.

2) $y = \cos(\theta + 60)$ LEFT 60° (1.3 BOXES)

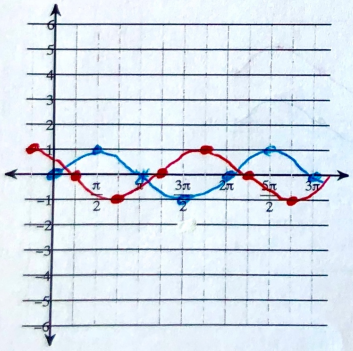


3) $y = \sin(\theta - 30)$ RIGHT 30° (1.5 BOXES)

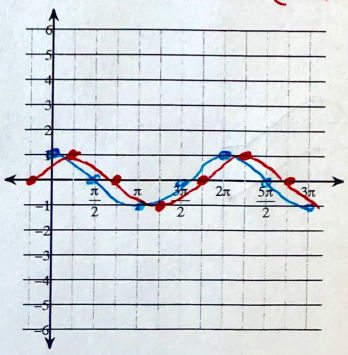


Graph each function using radians.

4) $y = \sin\left(\theta + \frac{3\pi}{4}\right)$ LEFT $\frac{3\pi}{4}$ (3 BOXES)



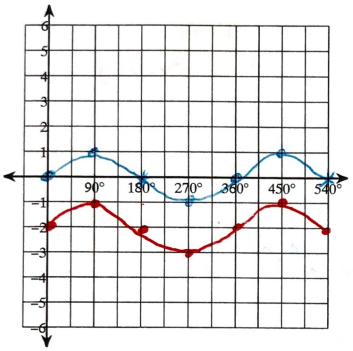
5) $y = \cos\left(\theta - \frac{\pi}{4}\right)$ RIGHT $\frac{\pi}{4}$ (1 BOX)



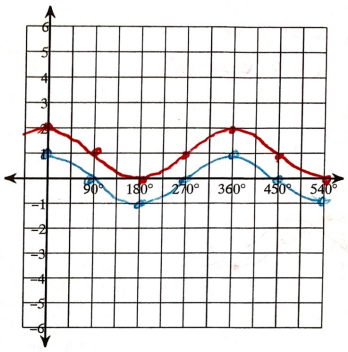
6) Vertical Shift: A VERTICAL TRANSLATION (IN UNITS)

Graph each function using degrees.

7) $y = -2 + \sin\theta$ DOWN 2

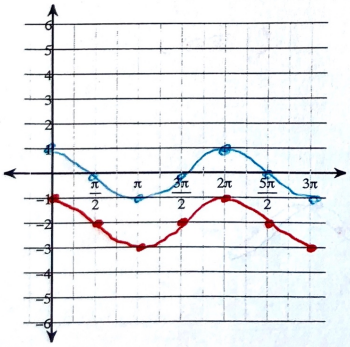


8) $y = \cos\theta + 1$ UP 1



Graph each function using radians.

9) $y = \cos\theta - 2$ DOWN 2



10) $y = \sin\theta + 2$ UP 2