

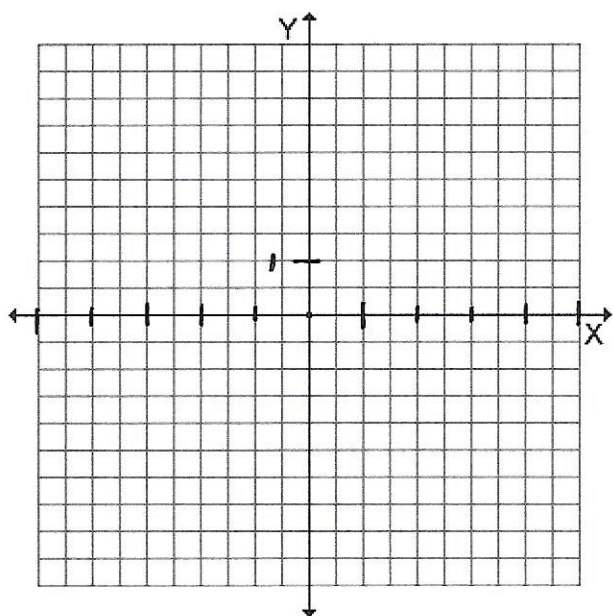
Pre Calculus
Practice Worksheet #1 Section: 4.5

Name: _____ Date: _____ Per: _____ Assignment # _____

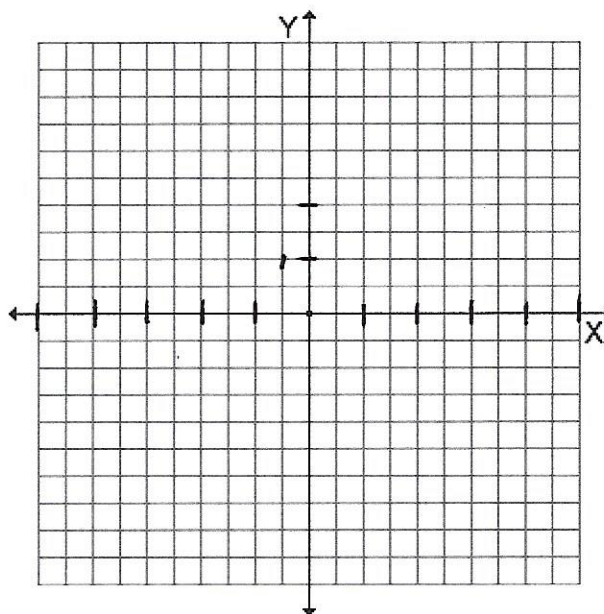
- Determine:**
- a) amplitude
 - b) value of "b"
 - c) period
 - d) phase shift
 - e) vertical translation
 - f) reflection? yes/no
 - g) graph the function.

Write these answers on the back.

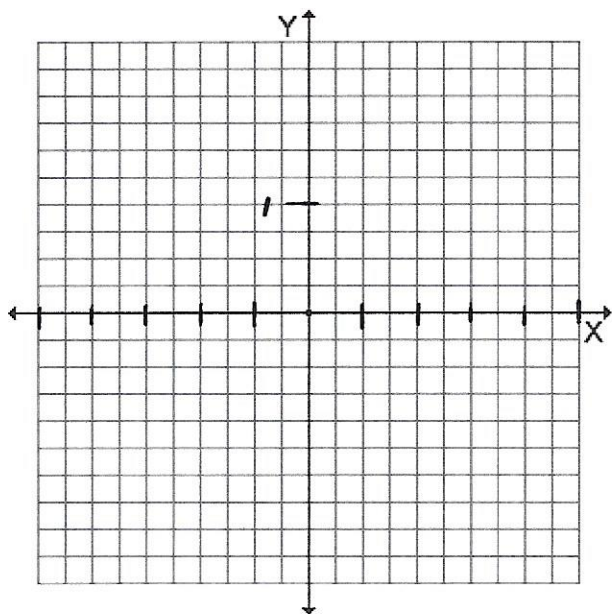
1) $y = 3 \sin\left(2x + \frac{\pi}{2}\right) + 2$



2) $y = -2 \cos(3x + \pi) - 2$



3) $y = -\sin\left(x + \frac{3\pi}{4}\right) - 1$



4) $y = \cos\left(3x - \frac{\pi}{2}\right) + 3$

