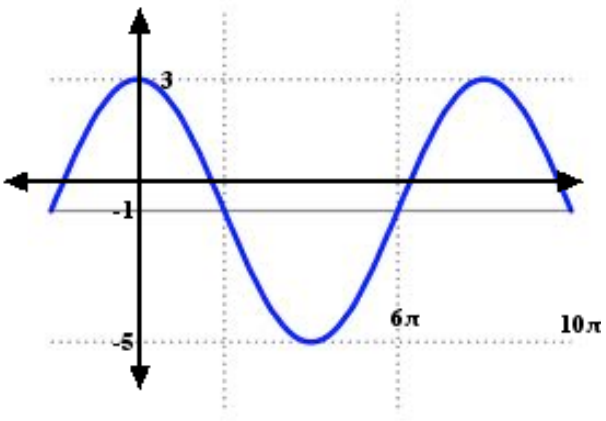
# PC12 LG 7A (Formative Assessment)

**Marking Teacher: _____** **Name: _____**

**Student #: _____**

**1. Given the sinusoidal curve graphed below, write its equation in the form $y = a\sin b(x-c)+d$ and $y = a\cos b(x-c)+d$.**

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**2. Given the function $y = -3\sin\left(4x - \frac{\pi}{4}\right) - 6$ answer the following questions:**

a) amplitude

b) period

c) vertical displacement

d) phase shift

e) domain

f) range

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**3. Write an equation of the cosine function with amplitude 4.5, period 16π, phase shift $\frac{3\pi}{4}$ to the left and vertical displacement of 18.**

**4. Determine the equation of the sinusoidal function with a maximum at (-4, 12) and the nearest minimum to the right at (12, -8). Write your answer as both a sine and as a cosine function.**

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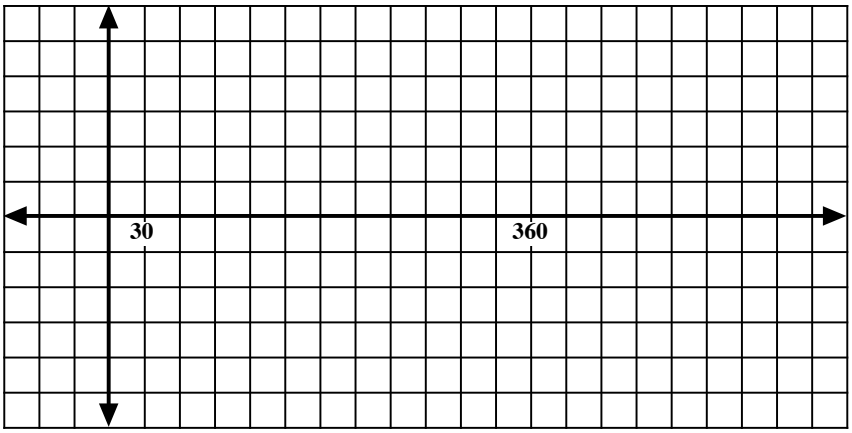
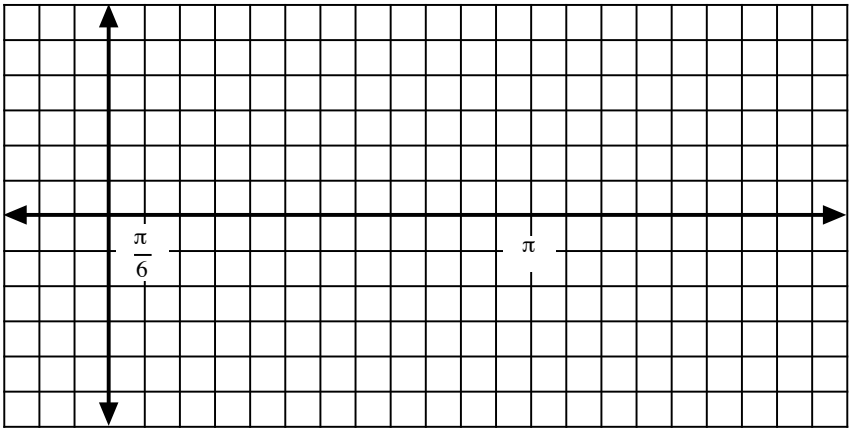
**5. Graph each of the following functions:**

**a)** $y = -2\sin(4x - 360^\circ) + 3$**, 0° ≤ x < 180°.**




**b)** $y = 3\cos\left(2x - \frac{\pi}{3}\right) - 2$ **for 2 cycles**



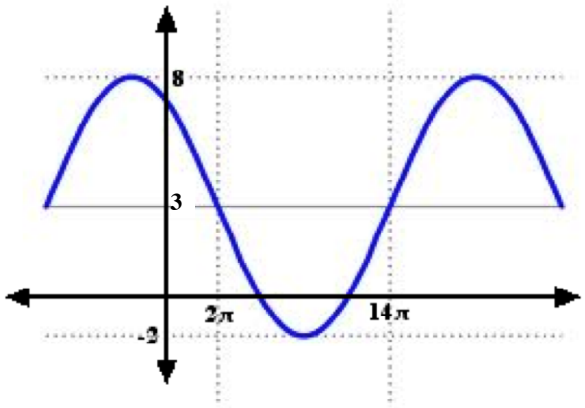

Directions: ☐ **See me about this** ☐ **Move on to next guide** ☐ **Review and redo**

# PC12 LG 7B (Formative Assessment)

**Marking Teacher: _____** **Name: _____**

**Student #: _____**

**1. Given the sinusoidal curve graphed below, write its equation in the form $y = a\sin b(x-c)+d$ and $y = a\cos b(x-c)+d$.**

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**2. Given the function $y = -2\cos\left(3x - \frac{\pi}{2}\right) + 8$ answer the following questions:**

a) amplitude

b) period

c) vertical displacement

d) phase shift

e) domain

f) range

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**3. Write an equation of the sine function with amplitude 8.5, period 4π, phase shift $\frac{5\pi}{2}$ to the right and vertical displacement of -19.**

**4. Determine the equation of the sinusoidal function with a minimum at (5, -12) and the nearest maximum to the right at (11, -2). Write your answer as both a sine and as a cosine function.**

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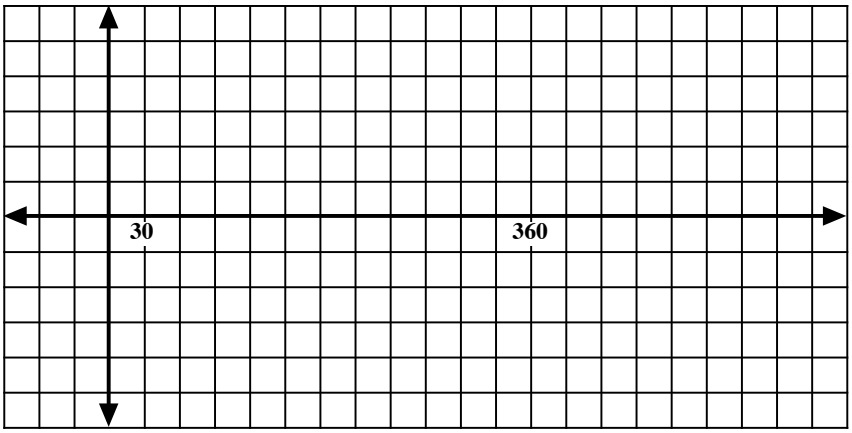
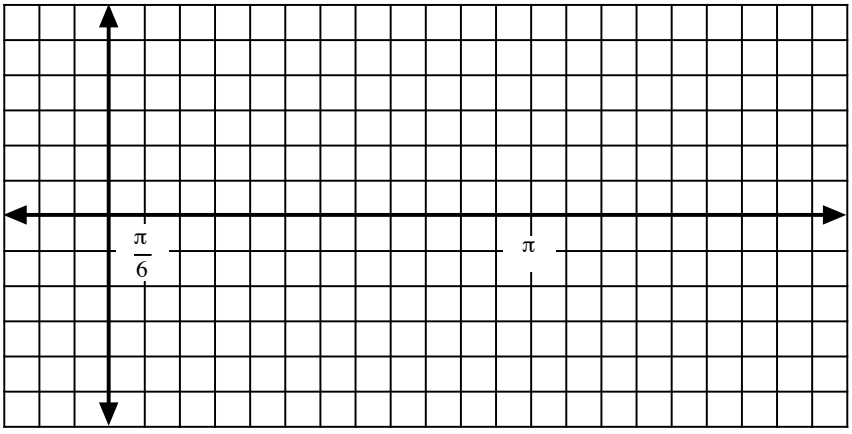
**5. Graph each of the following functions:**

**a)** $y = -2\cos(2x - 720^\circ) + 4$ **, 360˚ ≤ x < 540˚.**




**b)** $y = 4\sin\left(3x - \frac{\pi}{2}\right) - 1$ **for 2 cycles**




Directions: ☐ **See me about this** ☐ **Move on to next guide** ☐ **Review and redo**