Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mod 3 Lesson 5 Homework

Graph one cycle of each of the following:

1. $y=-3cos2x$ 3. $y=4cos\frac{x}{2}$
2. $y=-2cosx-5$ 4. $y=3sin3x+3$

Write the equation for each of the following functions.



5. 6.

π

2π

π

2π



x

y

7. 8.

2π

π

π

6. The temperature, in degrees Fahrenheit, inside a refrigerator can be modeled by the function $y = 38 + 1.5 cos \left(\frac{π}{10}x\right),$ where x is the number of minutes after the refrigerator’s motor begins to run.

* 1. Graph one cycle of this scenario
	2. The warmest temperature inside the refrigerator occurs when the motor first begins to run. What is this temperature?
	3. At what time does the refrigerator reach its coolest temperature? What is this temperature?