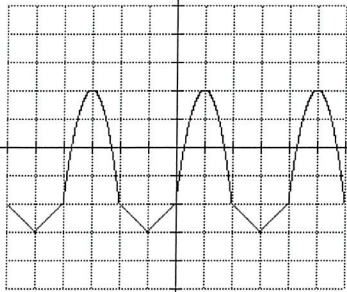


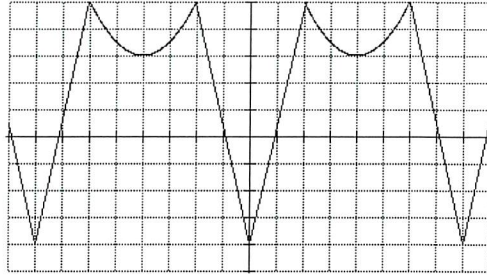
Day #81 Homework

Given below are sections of two periodic functions, $f(x)$ and $g(x)$. Use the graphs to answer the questions that follow.

Graph of $f(x)$



Graph of $g(x)$



Find each of the following function values using the graphs of the periodic functions pictured above. Show your work.

1. $f(21) =$

2. $f(30) =$

3. $f(-25) =$

4. $g(-64) =$

5. $g(84) =$

6. $g(34) =$

7. Explain how you used the period of $g(x)$ to find the function values in problems 1 – 6.
8. Create a table of values representing 5 points that can consecutively be connected by line segments to create one cycle of a periodic function whose period is 7. Explain why your table of values can represent a periodic function.
9. Create a table of values representing 5 points that cannot consecutively be connected by line segments to create one cycle of a periodic function. Explain why your table of values cannot represent a periodic function.

10. Using your table of values from question 8, state the domain, range, and amplitude of the function.

11. Sketch a graph of 2 complete cycles of your function from question 8.

