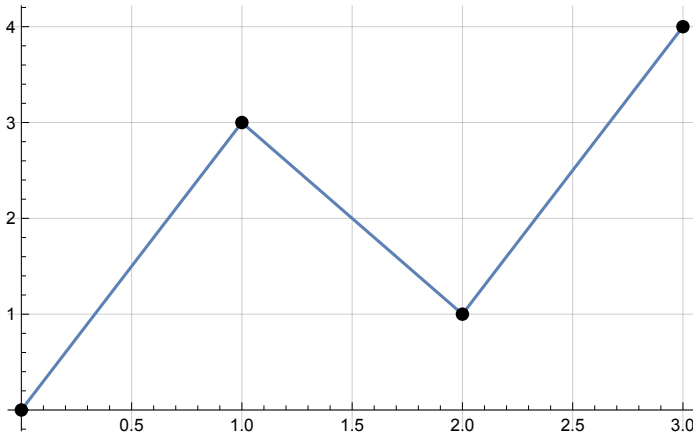


Assignment #1

Name _____

Due Wednesday, 30 August 2017

1. (5 points) A function f is pictured below. Sketch the graph of $y = 2f(x + 2) + 1$. Calculate the transformation of each of the indicated landmark points.



2. (5 points) The graph of the functions f and g are given below.

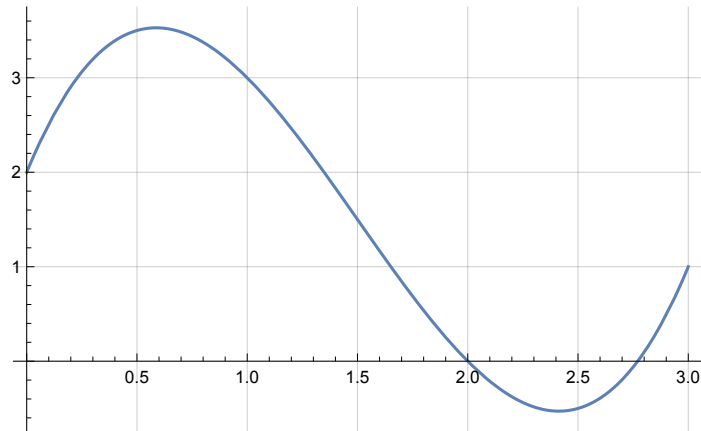


Figure 1: The graph of $f(x)$.

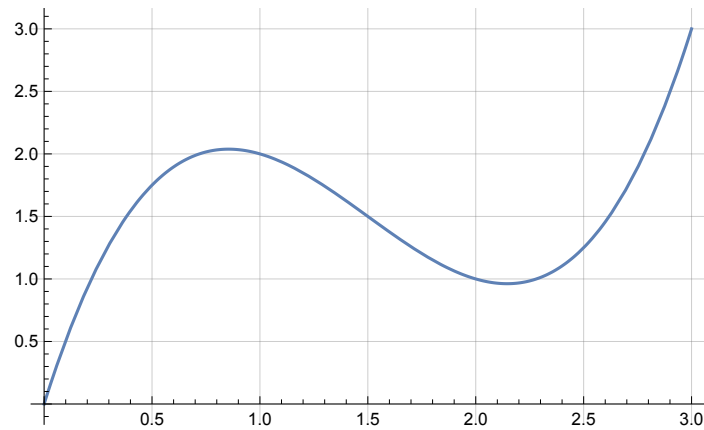


Figure 2: The graph of $g(x)$.

Let $p(x) = 3f(x) + 4g(x)$ and $q(x) = f(x)g(x) + f(g(x))$. In each case, perform the indicated operation.

(a) $p(0)$

(b) $p(2)$

(c) $q(1)$

(d) $q(3)$