

MTH 65 – Graded Homework 6

Due: 2:30 pm, January 31, 2011

Name _____

You may work on this assignment with your classmates or anybody else you please. You may get help from a tutor or even the instructor. What you may not do is simply copy somebody else's work – that completely obviates the purpose of the assignment. If you forget to complete the assignment before it is due, do not simply copy someone else's paper and turn that in ... that is not "working together," that is taking credit for somebody else's work.

Problem 1

Find each product. **Make sure that you show steps using proper organizational strategies.**

a. Expand and simplify $(a + 7)(a - 2)$.

b. Expand and simplify $(2y - 3)^2$.

c. Expand and simplify $(y^2 + 2)(y^4 - 2y^2 + 4)$.

Problem 2

Answer each of the following questions about the function g shown in Figure 1.

a. What are the solutions to the equation $g(x) = -3$?

b. Where does the function have a value of -3 ?

c. What is the function value at 0 ?

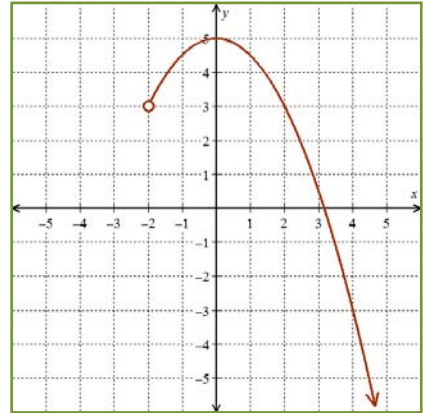


Figure 4: g

Problem 3

Find the value of $f(-2)$ if $f(x) = -x^2 + 4$.

Problem 4

Find the solution to the equation $g(x) = 19$ if $g(x) = 2x + 1$.