MAT 270 Name_____
Quiz 2 Sample Recitation Day & Time_____

1) Suppose you are considering the relationship of:

x, the number of minutes after 12:00 noon today (independent), and
y, the temperature at the MU fountain in Fahrenheit (dependent)

a. Is this relationship a valid function? _____ Why or why not?

b. - d. Using the function named *T* and units specified, express the temperature today at the fountain….

b. at 11:50 a.m._____ c. *h* minutes after 12:15 pm_____

d. Use *T* to express the change in temperature from 1 pm to 2 pm_____

e. What variable based on *x* and/or *y* could express this same change in temperature? _____

f. Write an expression for y_{NEW}, the current temperature, in terms of the temperature some time prior to this, y_{OLD}. (Don't use function notation, i.e. *T*.) y_{NEW} = _____

2) Suppose the first command line in a new GC file is the function definition

$p(b) = \pi b^2$

a. Below, write out the keystrokes, in order, that correctly produces the command line at right.

b. Suppose a function *g* is properly defined in GC. What other mathematical statement, if entered in GC, will produce each of these?

i) the value of *g* when the value of the indpendent variable is 15/7.

ii) the displayed graph of *g* for all non-negative values of the independent variable

iii) a displayed correspondance point determined by *g* when the independent variable = 15/7

iv) a vertical segment extending from the point defined in iii), to the point having the opposite dependent value

v) a horizontal segment extending from the *y*-axis to the point defined in iii)

c. Explain precisely what you are looking at when viewing a displayed graph, like the one described in 2b ii) above.