QUIZ 5

This quiz covers sections 2.2, 2.3 and 2.4.

PLEASE READ CAREFULLY

This is a group quiz. Each group is of 3 or 4 students. Only one paper per group is going to be returned. Write ALL the names on that paper.

Imagine that I have no idea of what you are doing and you have to explain everything!! This applies to all the quizzes and of course your exams. Not explicit answers will not take full marks!!

Exercise 1: Find the slope of the line which passes through the pair of points (3, -4) and (3,5) or state that the slope is undefined and indicate whether the line through the points rises, falls, is horizontal or is vertical   (1.5 point)

Exercise 2: Write the equation of the following line in point-slope form and slope-intercept form. The line which passes through (-1, 3) and is parallel to the line whose equation is 3x-2y-5=0.   (2 points)
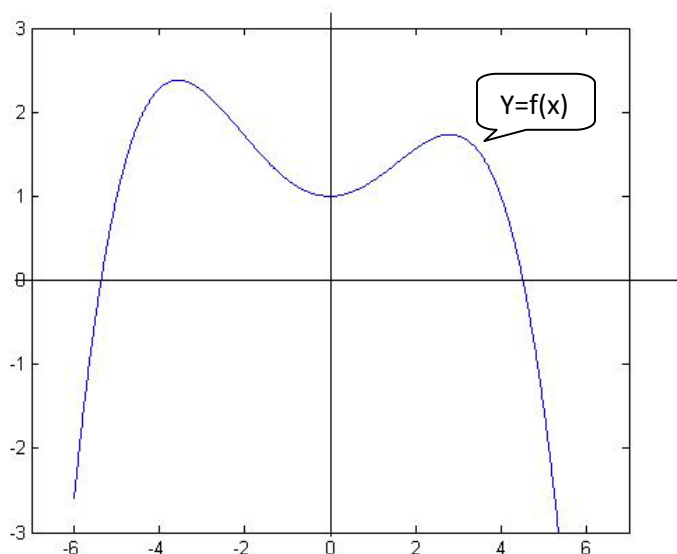
Exercise 3: If two lines are perpendicular, describe the relationship between their slopes.

(1.5 point)

Exercise 4: Solve the following equation: $(x - 3)^2 = 9$

(1 point)

Exercise 5: Use the graph of f to determine each of the following. Where applicable, use interval notation.   (4 points)

a) The domain of f.

b) The range of f.

c) The x intercept,

d) The y intercept,

e) Intervals on which f is increasing,

f) Intervals on which f is decreasing,

g) values of x for which $f(x) \leq 0$

h) The numbers at which f has a relative maximum,

i) The relative maxima of f

j) f(-2)

k) The values of x for which f(x)=0

Exercise 6: (1 BONUS point QUESTION)

Find and simplify the difference quotient $\frac{f(x+h)-f(x)}{h}, h \neq 0$ for $f(x) = 2x^2$