# Assignment #2-3

## **Secondary 3 Honors**

#### PreCalculus Book:

Pg. 137 6, 9, 12, 15, 18, 19, 26, 27, 30, 33, 36, 38, 39, 41, 47, 48, 53, 54, 57, 58

#### Carnegie Book:

Pg. 116 3(a -e)

### Additional Problems: Complete these problems on a separate sheet of paper.

Given  $f(x) = 2x^2 - 3$ , find the following:

- 1. f(-4) 2. f(x+1) 3.  $\frac{f(x+h)-f(x)}{h}$
- 4. Find the inverse of the function.  $f(x) = (x-3)^2$ ,  $x \ge 3$
- 5. A fenced in area is to be constructed with 180 feet of fencing next to a barn and an existing fence. No fencing is needed next to the barn or the existing fence. Label the figure in terms of x, write an equation for the area of the region, in term of x. Find the dimensions for the maximum area.



6. Graph the following without a calculator. Show at least 2 points.

a. 
$$y = 2(x-4)^2 + 1$$
 b.  $y = -x^3 + 2$  c.  $y = \sqrt{-x} - 3$