Assignment #1-4 Secondary 3 Honors

Precalculus Book

Pg. 38 – 41 1, 4, 8, 9, 14, 20, 21, 25, 33, 47, 61, 62, 65, 80, 91, 95 – 100

Review Problems:

1. Given the function $f(x) = x^3 + 4x^2 - 7x + 1$ use your graphing calculator to find each of the following:

   a. Relative maximum & minimum

   b. Intervals for increasing & decreasing

   c. Domain & Range

   d. x and y intercepts

   e. Determine whether the function is even, odd or neither.

2. Find the domain for the following functions:

   a. $\sqrt{x^2 - 9}$ b. $\frac{2x+3}{x-4}$ c. $\sqrt{2x-1}$

3. Graph the piecewise function $g(x) = \begin{cases} x+5 & x > -1 \\ -x+3 & x < -1 \end{cases}$ Is the function g(x) continuous?

4. Use the y_1 feature on your graphing calculator to evaluate $y_1(2.463)$ for $y_1 = 0.4x^2 - 7.2x - 1.3$