

Assignment #3-4

Secondary 3 Honors

PreCalculus Book:

Pg. 624 - 625 18, 21, 24, 27, 30, 33, 50-52, 59-61

Carnegie Book:

Pg. 252 #5(a, b)

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

1. Divide the following polynomials:

a. $(1 + 3x^2 + x^4) \div (3 - 2x + x^2)$

b. $(x^3 - 729) \div (x - 9)$

2. Factor the following polynomials:

a. $18x^3 - 27x^2 - 4x + 6$

b. $-9x^4 + 45x^3 - 9x^2$

c. $x^4 - 3x^3 - x^2 - 3x$

e. $x^4 - 50x^2 + 49$

Describe what happens to the graph of $g(x)$ if:

3. $g(x) = f(x) + 8$

4. $g(x) = f(x - 3)$

5. $g(x) = f(-x)$

6. $g(x) = -f(x)$