**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Advanced Algebra II – Assignment 2-4**

* **3-17.** Calculate the *x*-intercepts for the graph of each function below.
  1. *y* = (*x* − 2)(*x* + 1)
  2. *y* = 2*x*2 + 16*x* + 30
* **3-18.** Write the multiplier for each increase or decrease described below.

a. a 25% increase

b. a decrease of 18%

c. an increase of 39%

d. a decrease of 94%

* **3-19.** Simplify each of the following expressions.
  1. 3*x*2*yz*3 · 2*xyz*4
  2. http://textbooks.cpm.org/images/a2c/chap03/A2C3.19b.gif
  3. (3*rs*2*t* 3)5
  4. http://textbooks.cpm.org/images/a2c/chap03/A2C3.19d.gif
* **3-20.** Solve the system of equations below for *m* and *b*.

15 = 5*m* + *b*  
7 = 3*m + b*