****

**8-49.** Factor each polynomial.

* 1. *x*2 – 64 b. *y*2 − 6*y* + 9

c. 4*x*2 + 4*x* + 1 d. 5*x*2 − 45

**8-50.** The negative exponent rule is shown by the pattern, a-m = 1/am . This means that you turn the base upside down make the exponent positive:

Example: .

a. http://textbooks.cpm.org/images/cca/chap07/cca_chap07_.1.4_7-46_1.gif b. 100−1 c. http://textbooks.cpm.org/images/cca/chap07/cca_chap07_.1.4_7-46_3.gif

d. http://textbooks.cpm.org/images/cca/chap07/cca_chap07_.1.4_7-46_4.gif e. http://textbooks.cpm.org/images/cca/chap07/cca_chap07_.1.4_7-46_5.gif f. 6−3

g. http://textbooks.cpm.org/images/cca/chap07/cca_chap07_.1.4_7-46_7.gif h. 2−5 i. 3-2

**8-51.** Solve each of the following systems of equations algebraically. Then confirm your solutions by graphing.

* 1. *y* = 4*x* + 5 b. 2*x* + *y* = 9  
     *y* = −2*x* – 13 *y*= −*x* + 4

**8-53.** Solve the following equations for *x*.

* 1. 4*x* − 6*y =*20 b. **http://textbooks.cpm.org/images/cca/common/1-2.gif** *(x*− 6) = 9