

**Day 2 – Factor Trinomials when  $a = 1$ , and  $a > 1$** **Name:** \_\_\_\_\_**Practice Assignment****Date:** \_\_\_\_\_ **Block:** \_\_\_\_\_**Review: Subtract**  $(5x^2 - 3x + 2) - (8x^2 + 4x - 1)$ **Factor the expressions:**

1.  $4x^2 - 12x$

2.  $x^2 + 6x + 8$

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

4.  $x^2 + 6x + 9$

5.  $x^2 + x - 20$

6.  $x^2 - 6x + 5$

7.  $x^2 - 8x + 16$

8.  $x^2 + 5x + 6$

9.  $a^2 - 7a + 6$

10.  $x^2 + 5x - 14$

11.  $x^2 - 7x - 8$

12.  $x^2 - 2x - 48$

Name	Formula	Example
Difference of two squares	$A^2 - B^2 = (A + B)(A - B)$	$64x^2 - 9 = (8x)^2 - 3^2 = (8x + 3)(8x - 3)$

13.

a.  $x^2 - 9$

b.  $x^2 - 36$

c.  $m^4 - 81$

d.  $4b^2 - 400$

e.  $121a^8 - 64b^4$

14. Factor Trinomials when  $a > 1$ 

a.  $6x^2 - 1x - 2$

b.  $4x^2 - 9x - 9$

c.  $2x^2 + 7x - 15$

d.  $3a^2 - 10a + 8$

e.  $4x^2 + 12x + 9$

15. If the area of a rectangle is  $A = x^2 + 4x - 12$ , answer the following:

a. What are the side lengths of the rectangle?

b. What is the perimeter of the rectangle?