

Day 2 – Factor Trinomials when 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. $x^2 - 9$

9. $x^2 - 36$

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

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

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

13. Determine the values of k and n .

a. $(x + 4)(x + k) = x^2 + nx - 24$

b. $(x + k)(x - 1) = x^2 + nx - 5$

c. $(x + 5)(x + n) = x^2 + 3x + n$

14. Which of the following b values makes the trinomial $x^2 + bx - 30$ not factorable?

- A. 7
- B. -7
- C. 1
- D. 11

15. Which of the following b values makes the trinomial $x^2 + bx + 18$ not factorable?

- A. -11
- B. -9
- C. 7
- D. 19

16. 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?