

Chapter 8B – Factoring Review

Name_____

In each set of four factored trinomials, place the correct *signs* to give the middle term.

1. a) $2x^2 + 7x - 15 = (2x \quad 3)(x + 5)$ 2. a) $x^2 + 5x + 6 = (x \quad 2)(x \quad 3)$

b) $2x^2 - 7x - 15 = (2x \quad 3)(x - 5)$ b) $x^2 - x - 6 = (x \quad 2)(x \quad 3)$

c) $2x^2 - x - 15 = (2x \quad 5)(x \quad 3)$ c) $x^2 + x - 6 = (x \quad 2)(x \quad 3)$

d) $2x^2 - 13x + 15 = (2x \quad 3)(x \quad 5)$ d) $x^2 - 5x + 6 = (x \quad 2)(x \quad 3)$

3. a) $3x^2 - 5x - 2 = (3x \quad 1)(x \quad 2)$

4. a) $x^2 + 7x + 6 = (x \quad 6)(x \quad 1)$

b) $3x^2 - 7x + 2 = (3x \quad 1)(x \quad 2)$

b) $x^2 - 7x + 6 = (x \quad 6)(x \quad 1)$

c) $3x^2 + 7x + 2 = (3x \quad 1)(x \quad 2)$

c) $x^2 + 5x - 6 = (x \quad 6)(x \quad 1)$

d) $3x^2 + 5x - 2 = (3x \quad 1)(x \quad 2)$

d) $x^2 - 5x - 6 = (x \quad 6)(x \quad 1)$

Factor each trinomial. Show each trial including the OI check. Box/circle final answer.

5. $2x^2 - 7x + 5$

6. $5x^2 - 13x + 6$

7. $5x^2 - 7x - 6$

8. $4y^2 + 8y + 3$

9. $3m^2 + 5m - 28$

10. $2x^2 + 13x + 15$

11. $12y^2 + 7y + 1$

12. $5a^2 - 42a - 27$

13. $8p^2 - 10p + 3$

$$14. \ 2v^2 - 3v - 20$$

$$15. \ 12p^2 - 32p + 5$$

$$16. \ w^2 - 10w + 9$$

$$17. \ 9n^2 + 6n + 1$$

$$18. \ 9x^2 - 4$$

$$19. \ x^2 - 36$$

$$20. \ 4p^2 - 11p + 6$$

$$21. \ 6x^2 + 7x - 10$$

$$22. \ 4y^2 - 17y + 15$$

$$23. \ 15x^2 - 28x - 32$$