

Name _____

Date _____

Practice Set 6.3
Special Products

Use the FOIL method to find each product. Express the product in descending powers of the variable.

1. $(x + 7)(x + 3)$ 1. _____

2. $(2x + 3)(3x - 1)$ 2. _____

3. $(5x + 4)(3x - 2)$ 3. _____

4. $(2x + 1)(3x - 8)$ 4. _____

5. $(7x^2 - 5)(4x^2 + 2)$ 5. _____

Multiply using the rule for finding the product of the sum and difference of two terms.

6. $(x + 4)(x - 4)$ 6. _____

7. $(9x + 1)(9x - 1)$ 7. _____

8. $(3x + 5)(3x - 5)$ 8. _____

9. $\left(4x + \frac{1}{4}\right)\left(4x - \frac{1}{4}\right)$ 9. _____

10. $(x^2 + 6)(x^2 - 6)$ 10. _____

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Multiply using the rules for the square of a binomial.

11. $(2x + 5)^2$ 11. _____

12. $(7x + 3)^2$ 12. _____

13. $(x - 1)^2$ 13. _____

14. $(4 - 5x)^2$ 14. _____

15. $\left(3y - \frac{1}{3}\right)^2$ 15. _____

Multiply using the method of your choice.

16. $9x^2(4x^2 + x - 3)$ 16. _____

17. $(x + 2)^2$ 17. _____

18. $(x^2 + 3)^2$ 18. _____

19. $(3y - 2)(3y + 2)$ 19. _____

20. $(x - 3)(x^2 + 3x + 9)$ 20. _____