

# Factoring Quadratic Expressions (D)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Factor each expression.

$$1. \ -20x^2 - 152x + 252$$

$$11. \ -12x^2 + 100x + 72$$

$$2. \ 4x^2 - 18x - 162$$

$$12. \ -12x^2 + 57x + 15$$

$$3. \ 6x^2 - 9x + 3$$

$$13. \ -16x^2 - 64x + 36$$

$$4. \ 10x^2 - 35x + 15$$

$$14. \ 8x^2 + 30x + 18$$

$$5. \ 15x^2 + 147x + 108$$

$$15. \ -20x^2 - 104x + 252$$

$$6. \ 8x^2 - 40x + 50$$

$$16. \ -20x^2 - 225x - 405$$

$$7. \ 10x^2 - 25x - 60$$

$$17. \ 12x^2 + 12x - 45$$

$$8. \ -12x^2 - 63x - 81$$

$$18. \ -20x^2 + 44x + 48$$

$$9. \ -16x^2 + 32x - 12$$

$$19. \ 20x^2 + 45x - 45$$

$$10. \ 10x^2 - 115x + 280$$

$$20. \ 8x^2 - 28x - 60$$

# Factoring Quadratic Expressions (D) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Factor each expression.

1.  $-20x^2 - 152x + 252$

$-4(x + 9)(5x - 7)$

2.  $4x^2 - 18x - 162$

$2(2x + 9)(x - 9)$

3.  $6x^2 - 9x + 3$

$3(x - 1)(2x - 1)$

4.  $10x^2 - 35x + 15$

$5(x - 3)(2x - 1)$

5.  $15x^2 + 147x + 108$

$3(x + 9)(5x + 4)$

6.  $8x^2 - 40x + 50$

$2(2x - 5)(2x - 5) = 2(2x - 5)^2$

7.  $10x^2 - 25x - 60$

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

8.  $-12x^2 - 63x - 81$

$-3(x + 3)(4x + 9)$

9.  $-16x^2 + 32x - 12$

$-4(2x - 3)(2x - 1)$

10.  $10x^2 - 115x + 280$

$5(2x - 7)(x - 8)$

11.  $-12x^2 + 100x + 72$

$-4(x - 9)(3x + 2)$

12.  $-12x^2 + 57x + 15$

$-3(x - 5)(4x + 1)$

13.  $-16x^2 - 64x + 36$

$-4(2x - 1)(2x + 9)$

14.  $8x^2 + 30x + 18$

$2(4x + 3)(x + 3)$

15.  $-20x^2 - 104x + 252$

$-4(5x - 9)(x + 7)$

16.  $-20x^2 - 225x - 405$

$-5(x + 9)(4x + 9)$

17.  $12x^2 + 12x - 45$

$3(2x - 3)(2x + 5)$

18.  $-20x^2 + 44x + 48$

$-4(x - 3)(5x + 4)$

19.  $20x^2 + 45x - 45$

$5(x + 3)(4x - 3)$

20.  $8x^2 - 28x - 60$

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