

Factoring Quadratic Expressions (D)

Name: _____

Date: _____

Factor each expression.

1. $180x^2 + 300x + 125$

11. $84x^2 + 58x - 10$

2. $-60x^2 + 80x - 25$

12. $32x^2 - 12x - 54$

3. $324x^2 - 36x - 224$

13. $40x^2 + 50x + 15$

4. $-108x^2 + 216x - 105$

14. $16x^2 - 4x - 72$

5. $48x^2 + 54x + 15$

15. $-32x^2 + 36x - 4$

6. $-135x^2 + 204x - 21$

16. $21x^2 + 120x - 36$

7. $36x^2 - 78x - 14$

17. $-72x^2 - 183x - 105$

8. $-135x^2 - 15x + 10$

18. $36x^2 + 232x + 96$

9. $-50x^2 + 215x - 140$

19. $-90x^2 - 165x - 25$

10. $-144x^2 - 6x + 3$

20. $270x^2 + 195x - 140$

Factoring Quadratic Expressions (D) Answers

Name: _____

Date: _____

Factor each expression.

1. $180x^2 + 300x + 125$

$$5(6x + 5)(6x + 5) = 5(6x + 5)^2$$

2. $-60x^2 + 80x - 25$

$$-5(2x - 1)(6x - 5)$$

3. $324x^2 - 36x - 224$

$$4(9x - 8)(9x + 7)$$

4. $-108x^2 + 216x - 105$

$$-3(6x - 7)(6x - 5)$$

5. $48x^2 + 54x + 15$

$$3(8x + 5)(2x + 1)$$

6. $-135x^2 + 204x - 21$

$$-3(5x - 7)(9x - 1)$$

7. $36x^2 - 78x - 14$

$$2(3x - 7)(6x + 1)$$

8. $-135x^2 - 15x + 10$

$$-5(3x + 1)(9x - 2)$$

9. $-50x^2 + 215x - 140$

$$-5(2x - 7)(5x - 4)$$

10. $-144x^2 - 6x + 3$

$$-3(6x + 1)(8x - 1)$$

11. $84x^2 + 58x - 10$

$$2(7x - 1)(6x + 5)$$

12. $32x^2 - 12x - 54$

$$2(2x - 3)(8x + 9)$$

13. $40x^2 + 50x + 15$

$$5(2x + 1)(4x + 3)$$

14. $16x^2 - 4x - 72$

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

15. $-32x^2 + 36x - 4$

$$-4(8x - 1)(x - 1)$$

16. $21x^2 + 120x - 36$

$$3(7x - 2)(x + 6)$$

17. $-72x^2 - 183x - 105$

$$-3(3x + 5)(8x + 7)$$

18. $36x^2 + 232x + 96$

$$4(x + 6)(9x + 4)$$

19. $-90x^2 - 165x - 25$

$$-5(3x + 5)(6x + 1)$$

20. $270x^2 + 195x - 140$

$$5(6x + 7)(9x - 4)$$