

Factoring Quadratic Expressions (A)

Name: _____

Date: _____

Factor each expression.

1. $5x^2 - 38x - 16$

11. $-5x^2 - 21x + 54$

2. $6x^2 - 37x + 45$

12. $7x^2 - 60x - 27$

3. $6x^2 + 31x + 35$

13. $-8x^2 - 38x - 35$

4. $-6x^2 - 29x - 20$

14. $-2x^2 - 9x - 10$

5. $9x^2 + 32x + 15$

15. $-3x^2 + 34x - 63$

6. $-7x^2 - 65x - 72$

16. $8x^2 + 11x - 10$

7. $x^2 + 4x - 45$

17. $5x^2 + 44x + 63$

8. $-4x^2 - x + 18$

18. $8x^2 - 46x + 63$

9. $8x^2 + 73x + 72$

19. $8x^2 - 7x - 18$

10. $-9x^2 + 30x - 16$

20. $4x^2 + 4x - 15$

Factoring Quadratic Expressions (A) Answers

Name: _____

Date: _____

Factor each expression.

1. $5x^2 - 38x - 16$

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

2. $6x^2 - 37x + 45$

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

3. $6x^2 + 31x + 35$

$(2x + 7)(3x + 5)$

4. $-6x^2 - 29x - 20$

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

5. $9x^2 + 32x + 15$

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

6. $-7x^2 - 65x - 72$

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

7. $x^2 + 4x - 45$

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

8. $-4x^2 - x + 18$

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

9. $8x^2 + 73x + 72$

$(8x + 9)(x + 8)$

10. $-9x^2 + 30x - 16$

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

11. $-5x^2 - 21x + 54$

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

12. $7x^2 - 60x - 27$

$(x - 9)(7x + 3)$

13. $-8x^2 - 38x - 35$

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

14. $-2x^2 - 9x - 10$

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

15. $-3x^2 + 34x - 63$

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

16. $8x^2 + 11x - 10$

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

17. $5x^2 + 44x + 63$

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

18. $8x^2 - 46x + 63$

$(2x - 7)(4x - 9)$

19. $8x^2 - 7x - 18$

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

20. $4x^2 + 4x - 15$

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

Factoring Quadratic Expressions (B)

Name: _____

Date: _____

Factor each expression.

1. $-3x^2 + 20x + 32$

11. $-2x^2 - 7x + 9$

2. $9x^2 + 24x + 16$

12. $4x^2 + 4x - 63$

3. $-6x^2 + 17x + 3$

13. $4x^2 + 4x - 3$

4. $6x^2 + 7x - 10$

14. $-7x^2 - 13x - 6$

5. $7x^2 + 54x + 35$

15. $-8x^2 + 43x + 30$

6. $-6x^2 + 43x - 7$

16. $-7x^2 - 16x - 9$

7. $6x^2 + 17x + 12$

17. $-6x^2 - 19x - 14$

8. $-7x^2 + 11x + 6$

18. $6x^2 - 13x + 7$

9. $-3x^2 + 8x + 3$

19. $8x^2 + 9x - 14$

10. $-6x^2 + 5x - 1$

20. $-x^2 + 2x + 63$

Factoring Quadratic Expressions (B) Answers

Name: _____

Date: _____

Factor each expression.

1. $-3x^2 + 20x + 32$

$-(3x + 4)(x - 8)$

2. $9x^2 + 24x + 16$

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

3. $-6x^2 + 17x + 3$

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

4. $6x^2 + 7x - 10$

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

5. $7x^2 + 54x + 35$

$(7x + 5)(x + 7)$

6. $-6x^2 + 43x - 7$

$-(x - 7)(6x - 1)$

7. $6x^2 + 17x + 12$

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

8. $-7x^2 + 11x + 6$

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

9. $-3x^2 + 8x + 3$

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

10. $-6x^2 + 5x - 1$

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

11. $-2x^2 - 7x + 9$

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

12. $4x^2 + 4x - 63$

$(2x + 9)(2x - 7)$

13. $4x^2 + 4x - 3$

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

14. $-7x^2 - 13x - 6$

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

15. $-8x^2 + 43x + 30$

$-(x - 6)(8x + 5)$

16. $-7x^2 - 16x - 9$

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

17. $-6x^2 - 19x - 14$

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

18. $6x^2 - 13x + 7$

$(6x - 7)(x - 1)$

19. $8x^2 + 9x - 14$

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

20. $-x^2 + 2x + 63$

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

Factoring Quadratic Expressions (C)

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 7x + 6$

11. $4x^2 + 27x - 7$

2. $3x^2 + 28x + 9$

12. $3x^2 - 5x - 28$

3. $-9x^2 - 23x - 10$

13. $-8x^2 - 26x - 15$

4. $6x^2 - 11x - 7$

14. $-2x^2 + 11x - 9$

5. $-2x^2 + 19x - 9$

15. $4x^2 + 12x + 9$

6. $x^2 - 7x - 18$

16. $3x^2 + 8x - 16$

7. $9x^2 + 30x + 16$

17. $-7x^2 - 30x - 27$

8. $-2x^2 - 17x - 30$

18. $3x^2 - 5x + 2$

9. $-9x^2 + 80x + 9$

19. $-7x^2 - 50x - 48$

10. $-5x^2 - 23x + 42$

20. $6x^2 + x - 15$

Factoring Quadratic Expressions (C) Answers

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 7x + 6$

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

2. $3x^2 + 28x + 9$

$(3x + 1)(x + 9)$

3. $-9x^2 - 23x - 10$

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

4. $6x^2 - 11x - 7$

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

5. $-2x^2 + 19x - 9$

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

6. $x^2 - 7x - 18$

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

7. $9x^2 + 30x + 16$

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

8. $-2x^2 - 17x - 30$

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

9. $-9x^2 + 80x + 9$

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

10. $-5x^2 - 23x + 42$

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

11. $4x^2 + 27x - 7$

$(4x - 1)(x + 7)$

12. $3x^2 - 5x - 28$

$(x - 4)(3x + 7)$

13. $-8x^2 - 26x - 15$

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

14. $-2x^2 + 11x - 9$

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

15. $4x^2 + 12x + 9$

$(2x + 3)(2x + 3) = (2x + 3)^2$

16. $3x^2 + 8x - 16$

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

17. $-7x^2 - 30x - 27$

$-(x + 3)(7x + 9)$

18. $3x^2 - 5x + 2$

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

19. $-7x^2 - 50x - 48$

$-(x + 6)(7x + 8)$

20. $6x^2 + x - 15$

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

Factoring Quadratic Expressions (D)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + x - 3$

11. $8x^2 - 50x + 63$

2. $6x^2 - 35x - 49$

12. $-9x^2 - 41x + 20$

3. $-8x^2 + 38x - 45$

13. $9x^2 - 33x + 28$

4. $-6x^2 + 31x + 30$

14. $-4x^2 + 12x - 5$

5. $-6x^2 - 59x - 45$

15. $-8x^2 - 77x - 45$

6. $-7x^2 - 10x - 3$

16. $-3x^2 + 22x + 16$

7. $-5x^2 + 33x + 56$

17. $6x^2 + 7x - 3$

8. $4x^2 - 24x + 27$

18. $x^2 + 8x - 9$

9. $-9x^2 - 50x - 25$

19. $9x^2 + 10x + 1$

10. $-8x^2 + 49x - 45$

20. $-4x^2 - 11x + 3$

Factoring Quadratic Expressions (D) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + x - 3$

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

2. $6x^2 - 35x - 49$

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

3. $-8x^2 + 38x - 45$

$-(2x - 5)(4x - 9)$

4. $-6x^2 + 31x + 30$

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

5. $-6x^2 - 59x - 45$

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

6. $-7x^2 - 10x - 3$

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

7. $-5x^2 + 33x + 56$

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

8. $4x^2 - 24x + 27$

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

9. $-9x^2 - 50x - 25$

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

10. $-8x^2 + 49x - 45$

$-(8x - 9)(x - 5)$

11. $8x^2 - 50x + 63$

$(2x - 9)(4x - 7)$

12. $-9x^2 - 41x + 20$

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

13. $9x^2 - 33x + 28$

$(3x - 4)(3x - 7)$

14. $-4x^2 + 12x - 5$

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

15. $-8x^2 - 77x - 45$

$-(x + 9)(8x + 5)$

16. $-3x^2 + 22x + 16$

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

17. $6x^2 + 7x - 3$

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

18. $x^2 + 8x - 9$

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

19. $9x^2 + 10x + 1$

$(9x + 1)(x + 1)$

20. $-4x^2 - 11x + 3$

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

Factoring Quadratic Expressions (E)

Name: _____

Date: _____

Factor each expression.

1. $-3x^2 + 20x - 12$

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

2. $-3x^2 - 19x - 6$

12. $-9x^2 - 43x - 28$

3. $8x^2 + 39x - 54$

13. $-6x^2 + 23x - 21$

4. $6x^2 - 13x - 15$

14. $4x^2 - x - 18$

5. $-4x^2 - 4x + 15$

15. $-2x^2 + x + 28$

6. $-9x^2 - 9x + 10$

16. $6x^2 + 31x + 28$

7. $-6x^2 + 5x + 14$

17. $9x^2 - 62x - 7$

8. $-2x^2 + x + 21$

18. $4x^2 + 8x - 5$

9. $3x^2 + 22x + 35$

19. $6x^2 + 35x + 25$

10. $7x^2 + 33x - 10$

20. $-6x^2 - 13x + 5$

Factoring Quadratic Expressions (E) Answers

Name: _____

Date: _____

Factor each expression.

1. $-3x^2 + 20x - 12$

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

2. $-3x^2 - 19x - 6$

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

3. $8x^2 + 39x - 54$

$(x + 6)(8x - 9)$

4. $6x^2 - 13x - 15$

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

5. $-4x^2 - 4x + 15$

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

6. $-9x^2 - 9x + 10$

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

7. $-6x^2 + 5x + 14$

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

8. $-2x^2 + x + 21$

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

9. $3x^2 + 22x + 35$

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

10. $7x^2 + 33x - 10$

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

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

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

12. $-9x^2 - 43x - 28$

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

13. $-6x^2 + 23x - 21$

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

14. $4x^2 - x - 18$

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

15. $-2x^2 + x + 28$

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

16. $6x^2 + 31x + 28$

$(6x + 7)(x + 4)$

17. $9x^2 - 62x - 7$

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

18. $4x^2 + 8x - 5$

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

19. $6x^2 + 35x + 25$

$(x + 5)(6x + 5)$

20. $-6x^2 - 13x + 5$

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

Factoring Quadratic Expressions (F)

Name: _____

Date: _____

Factor each expression.

1. $8x^2 - 30x + 7$

11. $-9x^2 + 32x - 15$

2. $6x^2 - 5x - 56$

12. $-8x^2 + 18x - 7$

3. $-2x^2 - x + 45$

13. $8x^2 - 30x - 27$

4. $-2x^2 - 17x - 30$

14. $-9x^2 - 27x - 14$

5. $8x^2 - 18x - 35$

15. $6x^2 - x - 12$

6. $7x^2 + 52x - 32$

16. $8x^2 - 2x - 21$

7. $2x^2 - 21x + 54$

17. $5x^2 - 6x - 8$

8. $2x^2 + 19x + 45$

18. $9x^2 + 11x + 2$

9. $-9x^2 + 44x + 5$

19. $2x^2 + 19x + 9$

10. $-9x^2 - 35x + 4$

20. $4x^2 - 8x + 3$

Factoring Quadratic Expressions (F) Answers

Name: _____

Date: _____

Factor each expression.

1. $8x^2 - 30x + 7$

$(2x - 7)(4x - 1)$

2. $6x^2 - 5x - 56$

$(2x - 7)(3x + 8)$

3. $-2x^2 - x + 45$

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

4. $-2x^2 - 17x - 30$

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

5. $8x^2 - 18x - 35$

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

6. $7x^2 + 52x - 32$

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

7. $2x^2 - 21x + 54$

$(x - 6)(2x - 9)$

8. $2x^2 + 19x + 45$

$(x + 5)(2x + 9)$

9. $-9x^2 + 44x + 5$

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

10. $-9x^2 - 35x + 4$

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

11. $-9x^2 + 32x - 15$

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

12. $-8x^2 + 18x - 7$

$-(4x - 7)(2x - 1)$

13. $8x^2 - 30x - 27$

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

14. $-9x^2 - 27x - 14$

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

15. $6x^2 - x - 12$

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

16. $8x^2 - 2x - 21$

$(2x + 3)(4x - 7)$

17. $5x^2 - 6x - 8$

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

18. $9x^2 + 11x + 2$

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

19. $2x^2 + 19x + 9$

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

20. $4x^2 - 8x + 3$

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

Factoring Quadratic Expressions (G)

Name: _____

Date: _____

Factor each expression.

1. $8x^2 - 46x + 63$

11. $5x^2 + 29x - 42$

2. $-3x^2 + 5x + 2$

12. $-x^2 + x + 30$

3. $-3x^2 - 14x + 24$

13. $-4x^2 - 3x + 27$

4. $-7x^2 + 40x + 12$

14. $-2x^2 - 9x - 7$

5. $4x^2 + 3x - 7$

15. $-5x^2 + 37x + 24$

6. $x^2 + 3x - 4$

16. $4x^2 - 3x - 27$

7. $6x^2 + 35x + 36$

17. $-5x^2 - 33x - 40$

8. $2x^2 + 5x + 3$

18. $-7x^2 - 10x + 8$

9. $4x^2 - 16x + 15$

19. $-7x^2 - 38x + 24$

10. $5x^2 + 39x - 8$

20. $-4x^2 + 23x + 35$

Factoring Quadratic Expressions (G) Answers

Name: _____

Date: _____

Factor each expression.

1. $8x^2 - 46x + 63$

$(2x - 7)(4x - 9)$

2. $-3x^2 + 5x + 2$

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

3. $-3x^2 - 14x + 24$

$-(3x - 4)(x + 6)$

4. $-7x^2 + 40x + 12$

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

5. $4x^2 + 3x - 7$

$(4x + 7)(x - 1)$

6. $x^2 + 3x - 4$

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

7. $6x^2 + 35x + 36$

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

8. $2x^2 + 5x + 3$

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

9. $4x^2 - 16x + 15$

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

10. $5x^2 + 39x - 8$

$(x + 8)(5x - 1)$

11. $5x^2 + 29x - 42$

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

12. $-x^2 + x + 30$

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

13. $-4x^2 - 3x + 27$

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

14. $-2x^2 - 9x - 7$

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

15. $-5x^2 + 37x + 24$

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

16. $4x^2 - 3x - 27$

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

17. $-5x^2 - 33x - 40$

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

18. $-7x^2 - 10x + 8$

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

19. $-7x^2 - 38x + 24$

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

20. $-4x^2 + 23x + 35$

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

Factoring Quadratic Expressions (H)

Name: _____

Date: _____

Factor each expression.

1. $-2x^2 - 3x + 14$

11. $x^2 - 7x + 10$

2. $x^2 + 13x + 36$

12. $-6x^2 + 31x + 30$

3. $-3x^2 + 19x - 20$

13. $-8x^2 - 22x + 21$

4. $-9x^2 - 68x - 35$

14. $-x^2 + x + 30$

5. $2x^2 + 9x + 7$

15. $8x^2 - 10x - 7$

6. $6x^2 - 31x + 35$

16. $5x^2 - 28x - 49$

7. $-8x^2 - 2x + 3$

17. $7x^2 + 30x - 25$

8. $8x^2 - 30x + 27$

18. $-3x^2 + 11x - 10$

9. $9x^2 - 43x + 28$

19. $-6x^2 - 25x - 4$

10. $-6x^2 + 19x - 10$

20. $3x^2 - 29x + 40$

Factoring Quadratic Expressions (H) Answers

Name: _____

Date: _____

Factor each expression.

1. $-2x^2 - 3x + 14$

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

2. $x^2 + 13x + 36$

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

3. $-3x^2 + 19x - 20$

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

4. $-9x^2 - 68x - 35$

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

5. $2x^2 + 9x + 7$

$(2x + 7)(x + 1)$

6. $6x^2 - 31x + 35$

$(2x - 7)(3x - 5)$

7. $-8x^2 - 2x + 3$

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

8. $8x^2 - 30x + 27$

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

9. $9x^2 - 43x + 28$

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

10. $-6x^2 + 19x - 10$

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

11. $x^2 - 7x + 10$

$(x - 5)(x - 2)$

12. $-6x^2 + 31x + 30$

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

13. $-8x^2 - 22x + 21$

$-(2x + 7)(4x - 3)$

14. $-x^2 + x + 30$

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

15. $8x^2 - 10x - 7$

$(2x + 1)(4x - 7)$

16. $5x^2 - 28x - 49$

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

17. $7x^2 + 30x - 25$

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

18. $-3x^2 + 11x - 10$

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

19. $-6x^2 - 25x - 4$

$-(x + 4)(6x + 1)$

20. $3x^2 - 29x + 40$

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

Factoring Quadratic Expressions (I)

Name: _____

Date: _____

Factor each expression.

1. $-3x^2 + x + 14$

11. $9x^2 - 9x + 2$

2. $-x^2 - 10x - 21$

12. $-2x^2 + 7x + 15$

3. $6x^2 + 41x + 30$

13. $8x^2 - 15x - 27$

4. $x^2 - 13x + 36$

14. $6x^2 - 41x + 63$

5. $-9x^2 - 40x - 16$

15. $x^2 + 5x + 6$

6. $-9x^2 + 53x - 40$

16. $-6x^2 - 7x - 2$

7. $-5x^2 - 54x - 81$

17. $9x^2 - 49$

8. $6x^2 + 11x + 3$

18. $5x^2 - 17x + 6$

9. $-5x^2 - 19x - 12$

19. $8x^2 - 18x + 9$

10. $-8x^2 + 21x - 10$

20. $6x^2 + 17x - 14$

Factoring Quadratic Expressions (I) Answers

Name: _____

Date: _____

Factor each expression.

1. $-3x^2 + x + 14$

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

2. $-x^2 - 10x - 21$

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

3. $6x^2 + 41x + 30$

$(6x + 5)(x + 6)$

4. $x^2 - 13x + 36$

$(x - 4)(x - 9)$

5. $-9x^2 - 40x - 16$

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

6. $-9x^2 + 53x - 40$

$-(9x - 8)(x - 5)$

7. $-5x^2 - 54x - 81$

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

8. $6x^2 + 11x + 3$

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

9. $-5x^2 - 19x - 12$

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

10. $-8x^2 + 21x - 10$

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

11. $9x^2 - 9x + 2$

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

12. $-2x^2 + 7x + 15$

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

13. $8x^2 - 15x - 27$

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

14. $6x^2 - 41x + 63$

$(3x - 7)(2x - 9)$

15. $x^2 + 5x + 6$

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

16. $-6x^2 - 7x - 2$

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

17. $9x^2 - 49$

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

18. $5x^2 - 17x + 6$

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

19. $8x^2 - 18x + 9$

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

20. $6x^2 + 17x - 14$

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

Factoring Quadratic Expressions (J)

Name: _____

Date: _____

Factor each expression.

1. $-5x^2 - 51x - 54$

11. $-7x^2 - 46x - 24$

2. $-8x^2 + 69x + 27$

12. $2x^2 + 19x + 45$

3. $8x^2 - 39x - 5$

13. $-x^2 - x + 20$

4. $8x^2 - 6x - 27$

14. $-8x^2 + 35x + 25$

5. $-9x^2 + 22x + 15$

15. $-9x^2 + 56x + 49$

6. $-8x^2 + 9x - 1$

16. $2x^2 - 11x + 9$

7. $6x^2 - 17x - 3$

17. $5x^2 + 44x + 63$

8. $4x^2 + 23x - 35$

18. $-3x^2 + 14x + 49$

9. $5x^2 - 8x - 4$

19. $-8x^2 + 46x - 63$

10. $8x^2 + 55x - 7$

20. $-8x^2 - 22x - 15$

Factoring Quadratic Expressions (J) Answers

Name: _____

Date: _____

Factor each expression.

1. $-5x^2 - 51x - 54$

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

2. $-8x^2 + 69x + 27$

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

3. $8x^2 - 39x - 5$

$(x - 5)(8x + 1)$

4. $8x^2 - 6x - 27$

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

5. $-9x^2 + 22x + 15$

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

6. $-8x^2 + 9x - 1$

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

7. $6x^2 - 17x - 3$

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

8. $4x^2 + 23x - 35$

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

9. $5x^2 - 8x - 4$

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

10. $8x^2 + 55x - 7$

$(x + 7)(8x - 1)$

11. $-7x^2 - 46x - 24$

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

12. $2x^2 + 19x + 45$

$(2x + 9)(x + 5)$

13. $-x^2 - x + 20$

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

14. $-8x^2 + 35x + 25$

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

15. $-9x^2 + 56x + 49$

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

16. $2x^2 - 11x + 9$

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

17. $5x^2 + 44x + 63$

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

18. $-3x^2 + 14x + 49$

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

19. $-8x^2 + 46x - 63$

$-(4x - 9)(2x - 7)$

20. $-8x^2 - 22x - 15$

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