

# Factoring Quadratic Expressions (A)

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

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

Factor each expression.

1.  $-25x^2 - 25x + 14$

11.  $-16x^2 + 66x - 35$

2.  $-63x^2 - 17x + 10$

12.  $9x^2 - 86x + 45$

3.  $72x^2 + 97x + 18$

13.  $8x^2 - 75x + 27$

4.  $-35x^2 + 22x - 3$

14.  $18x^2 + 23x - 6$

5.  $-32x^2 - 12x + 5$

15.  $48x^2 - 38x - 21$

6.  $-3x^2 + 22x - 24$

16.  $-30x^2 + 19x + 63$

7.  $-40x^2 + 13x + 42$

17.  $-54x^2 + 33x - 4$

8.  $30x^2 + 13x - 56$

18.  $12x^2 + 23x - 24$

9.  $-5x^2 - 14x - 8$

19.  $16x^2 + 2x - 3$

10.  $-16x^2 + 46x - 15$

20.  $-2x^2 - 9x + 56$

# Factoring Quadratic Expressions (A) Answers

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

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

Factor each expression.

1.  $-25x^2 - 25x + 14$

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

2.  $-63x^2 - 17x + 10$

$-(7x - 2)(9x + 5)$

3.  $72x^2 + 97x + 18$

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

4.  $-35x^2 + 22x - 3$

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

5.  $-32x^2 - 12x + 5$

$-(4x - 1)(8x + 5)$

6.  $-3x^2 + 22x - 24$

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

7.  $-40x^2 + 13x + 42$

$-(5x - 6)(8x + 7)$

8.  $30x^2 + 13x - 56$

$(5x + 8)(6x - 7)$

9.  $-5x^2 - 14x - 8$

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

10.  $-16x^2 + 46x - 15$

$-(8x - 3)(2x - 5)$

11.  $-16x^2 + 66x - 35$

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

12.  $9x^2 - 86x + 45$

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

13.  $8x^2 - 75x + 27$

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

14.  $18x^2 + 23x - 6$

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

15.  $48x^2 - 38x - 21$

$(6x - 7)(8x + 3)$

16.  $-30x^2 + 19x + 63$

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

17.  $-54x^2 + 33x - 4$

$-(9x - 4)(6x - 1)$

18.  $12x^2 + 23x - 24$

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

19.  $16x^2 + 2x - 3$

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

20.  $-2x^2 - 9x + 56$

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

## Factoring Quadratic Expressions (B)

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

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

Factor each expression.

1.  $-20x^2 + x + 63$

11.  $18x^2 + 59x - 14$

2.  $-9x^2 - 17x + 2$

12.  $-5x^2 - 22x + 15$

3.  $-12x^2 - 37x - 21$

13.  $6x^2 - 17x + 7$

4.  $8x^2 + 10x - 3$

14.  $-24x^2 - 91x - 72$

5.  $-2x^2 - 19x - 42$

15.  $16x^2 + 22x - 45$

6.  $-63x^2 + 47x + 8$

16.  $8x^2 - 46x + 45$

7.  $-10x^2 - 19x + 15$

17.  $30x^2 - 83x + 56$

8.  $-36x^2 + 25x + 25$

18.  $-3x^2 - 2x + 21$

9.  $30x^2 - 29x + 4$

19.  $-49x^2 - 7x + 72$

10.  $9x^2 + 73x - 72$

20.  $27x^2 - 96x + 64$

# Factoring Quadratic Expressions (B) Answers

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

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

Factor each expression.

1.  $-20x^2 + x + 63$

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

2.  $-9x^2 - 17x + 2$

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

3.  $-12x^2 - 37x - 21$

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

4.  $8x^2 + 10x - 3$

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

5.  $-2x^2 - 19x - 42$

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

6.  $-63x^2 + 47x + 8$

$-(9x - 8)(7x + 1)$

7.  $-10x^2 - 19x + 15$

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

8.  $-36x^2 + 25x + 25$

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

9.  $30x^2 - 29x + 4$

$(6x - 1)(5x - 4)$

10.  $9x^2 + 73x - 72$

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

11.  $18x^2 + 59x - 14$

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

12.  $-5x^2 - 22x + 15$

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

13.  $6x^2 - 17x + 7$

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

14.  $-24x^2 - 91x - 72$

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

15.  $16x^2 + 22x - 45$

$(2x + 5)(8x - 9)$

16.  $8x^2 - 46x + 45$

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

17.  $30x^2 - 83x + 56$

$(6x - 7)(5x - 8)$

18.  $-3x^2 - 2x + 21$

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

19.  $-49x^2 - 7x + 72$

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

20.  $27x^2 - 96x + 64$

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

# Factoring Quadratic Expressions (C)

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

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

Factor each expression.

1.  $-20x^2 - x + 63$

11.  $-6x^2 - 31x + 30$

2.  $36x^2 + 49x + 5$

12.  $-4x^2 - x + 18$

3.  $6x^2 - 17x - 28$

13.  $20x^2 + 31x - 7$

4.  $8x^2 - 26x + 21$

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

5.  $20x^2 + 7x - 49$

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

6.  $-20x^2 - 51x - 28$

16.  $-40x^2 + 47x + 45$

7.  $72x^2 - 41x - 45$

17.  $-42x^2 - 13x + 40$

8.  $-12x^2 - 16x + 35$

18.  $20x^2 - 23x + 6$

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

19.  $-35x^2 + 22x - 3$

10.  $3x^2 - x - 14$

20.  $28x^2 + 65x + 28$

# Factoring Quadratic Expressions (C) Answers

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

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

Factor each expression.

1.  $-20x^2 - x + 63$

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

2.  $36x^2 + 49x + 5$

$(4x + 5)(9x + 1)$

3.  $6x^2 - 17x - 28$

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

4.  $8x^2 - 26x + 21$

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

5.  $20x^2 + 7x - 49$

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

6.  $-20x^2 - 51x - 28$

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

7.  $72x^2 - 41x - 45$

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

8.  $-12x^2 - 16x + 35$

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

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

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

10.  $3x^2 - x - 14$

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

11.  $-6x^2 - 31x + 30$

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

12.  $-4x^2 - x + 18$

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

13.  $20x^2 + 31x - 7$

$(4x + 7)(5x - 1)$

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

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

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

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

16.  $-40x^2 + 47x + 45$

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

17.  $-42x^2 - 13x + 40$

$-(6x - 5)(7x + 8)$

18.  $20x^2 - 23x + 6$

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

19.  $-35x^2 + 22x - 3$

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

20.  $28x^2 + 65x + 28$

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

# Factoring Quadratic Expressions (D)

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

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

Factor each expression.

1.  $12x^2 - 55x + 63$

11.  $-54x^2 + 21x + 20$

2.  $24x^2 - 23x + 5$

12.  $30x^2 + 41x + 7$

3.  $-16x^2 - 58x + 63$

13.  $-42x^2 + 11x + 3$

4.  $8x^2 - 41x + 5$

14.  $-48x^2 + 38x + 21$

5.  $-9x^2 - 53x + 6$

15.  $-35x^2 + 29x + 28$

6.  $18x^2 - 51x + 35$

16.  $-15x^2 + 49x - 40$

7.  $-9x^2 + 43x - 28$

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

8.  $54x^2 - 15x - 4$

18.  $-45x^2 - 14x + 48$

9.  $8x^2 - 13x + 5$

19.  $18x^2 - 89x + 36$

10.  $35x^2 - 13x - 4$

20.  $8x^2 + 45x + 25$

# Factoring Quadratic Expressions (D) Answers

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

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

Factor each expression.

1.  $12x^2 - 55x + 63$

$(3x - 7)(4x - 9)$

2.  $24x^2 - 23x + 5$

$(3x - 1)(8x - 5)$

3.  $-16x^2 - 58x + 63$

$-(8x - 7)(2x + 9)$

4.  $8x^2 - 41x + 5$

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

5.  $-9x^2 - 53x + 6$

$-(9x - 1)(x + 6)$

6.  $18x^2 - 51x + 35$

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

7.  $-9x^2 + 43x - 28$

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

8.  $54x^2 - 15x - 4$

$(6x + 1)(9x - 4)$

9.  $8x^2 - 13x + 5$

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

10.  $35x^2 - 13x - 4$

$(7x - 4)(5x + 1)$

11.  $-54x^2 + 21x + 20$

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

12.  $30x^2 + 41x + 7$

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

13.  $-42x^2 + 11x + 3$

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

14.  $-48x^2 + 38x + 21$

$-(6x - 7)(8x + 3)$

15.  $-35x^2 + 29x + 28$

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

16.  $-15x^2 + 49x - 40$

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

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

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

18.  $-45x^2 - 14x + 48$

$-(9x - 8)(5x + 6)$

19.  $18x^2 - 89x + 36$

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

20.  $8x^2 + 45x + 25$

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



# Factoring Quadratic Expressions (E)

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

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

Factor each expression.

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

11.  $-6x^2 - 23x + 35$

2.  $27x^2 - 66x + 7$

12.  $-16x^2 + 26x - 9$

3.  $72x^2 + 5x - 12$

13.  $-40x^2 + 31x + 35$

4.  $8x^2 + 27x + 9$

14.  $-27x^2 - 12x + 4$

5.  $6x^2 + 13x - 15$

15.  $-35x^2 + 23x + 6$

6.  $-21x^2 + 11x + 40$

16.  $-48x^2 - 14x + 49$

7.  $20x^2 - 47x + 21$

17.  $24x^2 - 5x - 36$

8.  $-24x^2 + 14x + 5$

18.  $-15x^2 - 29x - 12$

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

19.  $-9x^2 - 52x + 12$

10.  $-18x^2 - 11x - 1$

20.  $21x^2 - 43x - 14$

# Factoring Quadratic Expressions (E) Answers

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

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

Factor each expression.

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

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

2.  $27x^2 - 66x + 7$

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

3.  $72x^2 + 5x - 12$

$(9x + 4)(8x - 3)$

4.  $8x^2 + 27x + 9$

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

5.  $6x^2 + 13x - 15$

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

6.  $-21x^2 + 11x + 40$

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

7.  $20x^2 - 47x + 21$

$(4x - 7)(5x - 3)$

8.  $-24x^2 + 14x + 5$

$-(4x + 1)(6x - 5)$

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

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

10.  $-18x^2 - 11x - 1$

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

11.  $-6x^2 - 23x + 35$

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

12.  $-16x^2 + 26x - 9$

$-(8x - 9)(2x - 1)$

13.  $-40x^2 + 31x + 35$

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

14.  $-27x^2 - 12x + 4$

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

15.  $-35x^2 + 23x + 6$

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

16.  $-48x^2 - 14x + 49$

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

17.  $24x^2 - 5x - 36$

$(3x - 4)(8x + 9)$

18.  $-15x^2 - 29x - 12$

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

19.  $-9x^2 - 52x + 12$

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

20.  $21x^2 - 43x - 14$

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

# Factoring Quadratic Expressions (F)

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

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

Factor each expression.

1.  $-35x^2 + 33x + 8$

11.  $-21x^2 + 19x + 12$

2.  $20x^2 + 49x + 9$

12.  $-40x^2 + 69x - 8$

3.  $10x^2 - 61x + 72$

13.  $-30x^2 - 19x + 63$

4.  $8x^2 - 47x - 6$

14.  $27x^2 + 51x + 10$

5.  $-7x^2 - 40x + 63$

15.  $-12x^2 + 41x - 24$

6.  $18x^2 + 59x + 35$

16.  $32x^2 - 108x + 81$

7.  $-2x^2 - 7x + 72$

17.  $20x^2 - 47x + 21$

8.  $-42x^2 - 29x + 6$

18.  $-35x^2 - 29x + 28$

9.  $-6x^2 + 17x - 7$

19.  $-56x^2 + 13x + 30$

10.  $5x^2 + 21x + 18$

20.  $-72x^2 - 29x + 10$

# Factoring Quadratic Expressions (F) Answers

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

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

Factor each expression.

1.  $-35x^2 + 33x + 8$

$-(5x + 1)(7x - 8)$

2.  $20x^2 + 49x + 9$

$(5x + 1)(4x + 9)$

3.  $10x^2 - 61x + 72$

$(5x - 8)(2x - 9)$

4.  $8x^2 - 47x - 6$

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

5.  $-7x^2 - 40x + 63$

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

6.  $18x^2 + 59x + 35$

$(2x + 5)(9x + 7)$

7.  $-2x^2 - 7x + 72$

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

8.  $-42x^2 - 29x + 6$

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

9.  $-6x^2 + 17x - 7$

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

10.  $5x^2 + 21x + 18$

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

11.  $-21x^2 + 19x + 12$

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

12.  $-40x^2 + 69x - 8$

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

13.  $-30x^2 - 19x + 63$

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

14.  $27x^2 + 51x + 10$

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

15.  $-12x^2 + 41x - 24$

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

16.  $32x^2 - 108x + 81$

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

17.  $20x^2 - 47x + 21$

$(5x - 3)(4x - 7)$

18.  $-35x^2 - 29x + 28$

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

19.  $-56x^2 + 13x + 30$

$-(8x + 5)(7x - 6)$

20.  $-72x^2 - 29x + 10$

$-(9x - 2)(8x + 5)$

# Factoring Quadratic Expressions (G)

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

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

Factor each expression.

1.  $-15x^2 - 32x - 9$

11.  $-72x^2 + 23x + 35$

2.  $-36x^2 + 77x - 40$

12.  $4x^2 + 5x - 6$

3.  $-30x^2 - 13x + 56$

13.  $-18x^2 - 9x + 14$

4.  $63x^2 + 59x + 10$

14.  $-6x^2 + 11x + 72$

5.  $-49x^2 + 42x + 27$

15.  $54x^2 + 3x - 1$

6.  $-48x^2 - 38x + 21$

16.  $-35x^2 + 48x + 27$

7.  $72x^2 - 5x - 12$

17.  $8x^2 - 19x - 15$

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

18.  $-27x^2 + 51x + 28$

9.  $30x^2 - 7x - 2$

19.  $-72x^2 - 79x - 14$

10.  $-7x^2 + 23x - 18$

20.  $9x^2 + 79x + 56$

# Factoring Quadratic Expressions (G) Answers

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

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

Factor each expression.

1.  $-15x^2 - 32x - 9$

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

2.  $-36x^2 + 77x - 40$

$-(9x - 8)(4x - 5)$

3.  $-30x^2 - 13x + 56$

$-(6x - 7)(5x + 8)$

4.  $63x^2 + 59x + 10$

$(7x + 5)(9x + 2)$

5.  $-49x^2 + 42x + 27$

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

6.  $-48x^2 - 38x + 21$

$-(8x - 3)(6x + 7)$

7.  $72x^2 - 5x - 12$

$(8x + 3)(9x - 4)$

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

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

9.  $30x^2 - 7x - 2$

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

10.  $-7x^2 + 23x - 18$

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

11.  $-72x^2 + 23x + 35$

$-(8x - 7)(9x + 5)$

12.  $4x^2 + 5x - 6$

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

13.  $-18x^2 - 9x + 14$

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

14.  $-6x^2 + 11x + 72$

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

15.  $54x^2 + 3x - 1$

$(6x + 1)(9x - 1)$

16.  $-35x^2 + 48x + 27$

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

17.  $8x^2 - 19x - 15$

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

18.  $-27x^2 + 51x + 28$

$-(3x - 7)(9x + 4)$

19.  $-72x^2 - 79x - 14$

$-(9x + 2)(8x + 7)$

20.  $9x^2 + 79x + 56$

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

# Factoring Quadratic Expressions (H)

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

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

Factor each expression.

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

11.  $27x^2 - 6x - 5$

2.  $-42x^2 - 85x - 42$

12.  $-6x^2 - 19x - 3$

3.  $-6x^2 + 7x + 5$

13.  $-56x^2 - 55x + 9$

4.  $2x^2 - 5x - 25$

14.  $27x^2 + 30x - 25$

5.  $-9x^2 + 36x - 35$

15.  $-30x^2 - 11x - 1$

6.  $-8x^2 + 59x + 40$

16.  $-10x^2 + 17x - 6$

7.  $-9x^2 + 41x - 20$

17.  $-4x^2 - 13x - 10$

8.  $-8x^2 - 69x - 40$

18.  $-24x^2 + 47x - 20$

9.  $-9x^2 - 27x - 20$

19.  $-54x^2 - 3x + 2$

10.  $20x^2 + 43x + 21$

20.  $-63x^2 - 58x + 16$

# Factoring Quadratic Expressions (H) Answers

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

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

Factor each expression.

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

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

2.  $-42x^2 - 85x - 42$

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

3.  $-6x^2 + 7x + 5$

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

4.  $2x^2 - 5x - 25$

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

5.  $-9x^2 + 36x - 35$

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

6.  $-8x^2 + 59x + 40$

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

7.  $-9x^2 + 41x - 20$

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

8.  $-8x^2 - 69x - 40$

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

9.  $-9x^2 - 27x - 20$

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

10.  $20x^2 + 43x + 21$

$(4x + 3)(5x + 7)$

11.  $27x^2 - 6x - 5$

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

12.  $-6x^2 - 19x - 3$

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

13.  $-56x^2 - 55x + 9$

$-(8x + 9)(7x - 1)$

14.  $27x^2 + 30x - 25$

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

15.  $-30x^2 - 11x - 1$

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

16.  $-10x^2 + 17x - 6$

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

17.  $-4x^2 - 13x - 10$

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

18.  $-24x^2 + 47x - 20$

$-(8x - 5)(3x - 4)$

19.  $-54x^2 - 3x + 2$

$-(6x - 1)(9x + 2)$

20.  $-63x^2 - 58x + 16$

$-(7x + 8)(9x - 2)$



# Factoring Quadratic Expressions (I)

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

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

Factor each expression.

1.  $-3x^2 - 19x - 28$

11.  $-3x^2 - 8x - 5$

2.  $-36x^2 + 12x - 1$

12.  $56x^2 + 73x + 21$

3.  $18x^2 + 31x + 6$

13.  $-48x^2 - 98x - 49$

4.  $9x^2 + 59x - 28$

14.  $45x^2 - 92x + 32$

5.  $-81x^2 - 90x - 16$

15.  $32x^2 - 100x + 63$

6.  $42x^2 - 19x - 35$

16.  $40x^2 + 81x + 35$

7.  $16x^2 + 42x + 27$

17.  $-15x^2 - 17x + 4$

8.  $-18x^2 + 73x - 35$

18.  $12x^2 + 13x + 3$

9.  $9x^2 - 26x - 3$

19.  $40x^2 - 87x + 27$

10.  $5x^2 - 44x + 63$

20.  $40x^2 + 3x - 54$

# Factoring Quadratic Expressions (I) Answers

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

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

Factor each expression.

1.  $-3x^2 - 19x - 28$

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

2.  $-36x^2 + 12x - 1$

$-(6x - 1)(6x - 1) = -(6x - 1)^2$

3.  $18x^2 + 31x + 6$

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

4.  $9x^2 + 59x - 28$

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

5.  $-81x^2 - 90x - 16$

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

6.  $42x^2 - 19x - 35$

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

7.  $16x^2 + 42x + 27$

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

8.  $-18x^2 + 73x - 35$

$-(2x - 7)(9x - 5)$

9.  $9x^2 - 26x - 3$

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

10.  $5x^2 - 44x + 63$

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

11.  $-3x^2 - 8x - 5$

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

12.  $56x^2 + 73x + 21$

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

13.  $-48x^2 - 98x - 49$

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

14.  $45x^2 - 92x + 32$

$(5x - 8)(9x - 4)$

15.  $32x^2 - 100x + 63$

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

16.  $40x^2 + 81x + 35$

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

17.  $-15x^2 - 17x + 4$

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

18.  $12x^2 + 13x + 3$

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

19.  $40x^2 - 87x + 27$

$(8x - 3)(5x - 9)$

20.  $40x^2 + 3x - 54$

$(8x - 9)(5x + 6)$

# Factoring Quadratic Expressions (J)

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

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

Factor each expression.

1.  $-15x^2 - 8x - 1$

11.  $-5x^2 - 28x - 32$

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

12.  $-6x^2 - 17x + 28$

3.  $-45x^2 - 76x + 9$

13.  $-54x^2 + 33x + 10$

4.  $6x^2 + 11x + 4$

14.  $9x^2 + 42x + 49$

5.  $12x^2 + 20x + 7$

15.  $6x^2 - 61x + 63$

6.  $-45x^2 + 22x + 3$

16.  $-4x^2 + 13x + 12$

7.  $24x^2 + 43x + 5$

17.  $-81x^2 + 9x + 56$

8.  $-7x^2 + 20x + 32$

18.  $-7x^2 + 17x + 12$

9.  $-3x^2 + 17x - 24$

19.  $-21x^2 + 76x - 63$

10.  $24x^2 - 61x - 8$

20.  $6x^2 - 49x + 49$

# Factoring Quadratic Expressions (J) Answers

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

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

Factor each expression.

1.  $-15x^2 - 8x - 1$

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

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

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

3.  $-45x^2 - 76x + 9$

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

4.  $6x^2 + 11x + 4$

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

5.  $12x^2 + 20x + 7$

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

6.  $-45x^2 + 22x + 3$

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

7.  $24x^2 + 43x + 5$

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

8.  $-7x^2 + 20x + 32$

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

9.  $-3x^2 + 17x - 24$

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

10.  $24x^2 - 61x - 8$

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

11.  $-5x^2 - 28x - 32$

$-(x + 4)(5x + 8)$

12.  $-6x^2 - 17x + 28$

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

13.  $-54x^2 + 33x + 10$

$-(6x - 5)(9x + 2)$

14.  $9x^2 + 42x + 49$

$(3x + 7)(3x + 7) = (3x + 7)^2$

15.  $6x^2 - 61x + 63$

$(6x - 7)(x - 9)$

16.  $-4x^2 + 13x + 12$

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

17.  $-81x^2 + 9x + 56$

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

18.  $-7x^2 + 17x + 12$

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

19.  $-21x^2 + 76x - 63$

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

20.  $6x^2 - 49x + 49$

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