

Factoring Quadratic Expressions (A)

Name: _____

Date: _____

Factor each expression.

$$1. \ 3x^2 + 5x - 2$$

$$11. \ 3x^2 - 20x - 32$$

$$2. \ 4x^2 + 9x - 9$$

$$12. \ 3x^2 - 11x - 4$$

$$3. \ 4x^2 + 15x - 54$$

$$13. \ 2x^2 + 23x + 63$$

$$4. \ 2x^2 + 3x - 14$$

$$14. \ 3x^2 - 20x - 7$$

$$5. \ 4x^2 - 81$$

$$15. \ 2x^2 + 21x + 27$$

$$6. \ 3x^2 - 25x + 8$$

$$16. \ 4x^2 - 25x + 25$$

$$7. \ 2x^2 + 21x + 49$$

$$17. \ 4x^2 - 5x - 6$$

$$8. \ 3x^2 - 19x + 20$$

$$18. \ 4x^2 - 16x - 9$$

$$9. \ 4x^2 - 4x - 63$$

$$19. \ 4x^2 + 20x + 9$$

$$10. \ 3x^2 + 19x + 6$$

$$20. \ 2x^2 + 21x + 40$$

Factoring Quadratic Expressions (A) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 + 5x - 2$

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

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

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

3. $4x^2 + 15x - 54$

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

4. $2x^2 + 3x - 14$

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

5. $4x^2 - 81$

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

6. $3x^2 - 25x + 8$

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

7. $2x^2 + 21x + 49$

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

8. $3x^2 - 19x + 20$

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

9. $4x^2 - 4x - 63$

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

10. $3x^2 + 19x + 6$

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

11. $3x^2 - 20x - 32$

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

12. $3x^2 - 11x - 4$

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

13. $2x^2 + 23x + 63$

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

14. $3x^2 - 20x - 7$

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

15. $2x^2 + 21x + 27$

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

16. $4x^2 - 25x + 25$

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

17. $4x^2 - 5x - 6$

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

18. $4x^2 - 16x - 9$

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

19. $4x^2 + 20x + 9$

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

20. $2x^2 + 21x + 40$

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

Factoring Quadratic Expressions (B)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 12x + 5$

11. $4x^2 - 17x + 4$

2. $4x^2 - 21x + 5$

12. $3x^2 - 22x + 7$

3. $3x^2 - 19x - 40$

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

4. $3x^2 - x - 24$

14. $3x^2 - 22x + 35$

5. $2x^2 - 3x - 35$

15. $4x^2 + 19x - 63$

6. $x^2 - 15x + 54$

16. $4x^2 - 7x + 3$

7. $4x^2 - 9x + 2$

17. $x^2 - 17x + 72$

8. $x^2 - 12x + 27$

18. $4x^2 - 19x - 30$

9. $4x^2 + 23x - 35$

19. $2x^2 + 3x - 9$

10. $4x^2 + 39x + 27$

20. $3x^2 + 5x + 2$

Factoring Quadratic Expressions (B) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 12x + 5$

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

11. $4x^2 - 17x + 4$

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

2. $4x^2 - 21x + 5$

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

12. $3x^2 - 22x + 7$

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

3. $3x^2 - 19x - 40$

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

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

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

4. $3x^2 - x - 24$

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

14. $3x^2 - 22x + 35$

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

5. $2x^2 - 3x - 35$

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

15. $4x^2 + 19x - 63$

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

6. $x^2 - 15x + 54$

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

16. $4x^2 - 7x + 3$

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

7. $4x^2 - 9x + 2$

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

17. $x^2 - 17x + 72$

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

8. $x^2 - 12x + 27$

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

18. $4x^2 - 19x - 30$

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

9. $4x^2 + 23x - 35$

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

19. $2x^2 + 3x - 9$

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

10. $4x^2 + 39x + 27$

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

20. $3x^2 + 5x + 2$

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

Factoring Quadratic Expressions (C)

Name: _____

Date: _____

Factor each expression.

1. $3x^2 - 17x + 10$

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

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

12. $3x^2 + 14x + 15$

3. $4x^2 - 27x - 7$

13. $x^2 + 4x - 32$

4. $3x^2 - 19x - 72$

14. $3x^2 + 16x + 16$

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

15. $x^2 - 1$

6. $3x^2 - 14x + 16$

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

7. $x^2 + 14x + 48$

17. $4x^2 + 16x - 9$

8. $x^2 - 3x - 18$

18. $3x^2 + 19x + 28$

9. $4x^2 + 32x + 63$

19. $3x^2 + 4x + 1$

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

20. $4x^2 - 43x + 63$

Factoring Quadratic Expressions (C) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 - 17x + 10$

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

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

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

3. $4x^2 - 27x - 7$

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

4. $3x^2 - 19x - 72$

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

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

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

6. $3x^2 - 14x + 16$

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

7. $x^2 + 14x + 48$

$(x + 6)(x + 8)$

8. $x^2 - 3x - 18$

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

9. $4x^2 + 32x + 63$

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

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

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

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

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

12. $3x^2 + 14x + 15$

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

13. $x^2 + 4x - 32$

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

14. $3x^2 + 16x + 16$

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

15. $x^2 - 1$

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

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

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

17. $4x^2 + 16x - 9$

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

18. $3x^2 + 19x + 28$

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

19. $3x^2 + 4x + 1$

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

20. $4x^2 - 43x + 63$

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

Factoring Quadratic Expressions (D)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 8x - 45$

11. $4x^2 - 15x + 9$

2. $2x^2 - 17x + 35$

12. $4x^2 - 19x - 63$

3. $4x^2 - 4x - 15$

13. $2x^2 + 5x - 18$

4. $2x^2 - 11x - 40$

14. $4x^2 - 41x + 45$

5. $3x^2 - 25x + 8$

15. $3x^2 + 19x + 28$

6. $3x^2 - 32x + 64$

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

7. $2x^2 - 15x + 27$

17. $3x^2 - 14x + 16$

8. $4x^2 + 17x - 42$

18. $4x^2 - 28x + 45$

9. $4x^2 - 11x + 6$

19. $4x^2 + 8x - 5$

10. $2x^2 - 17x + 8$

20. $4x^2 + x - 18$

Factoring Quadratic Expressions (D) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 8x - 45$

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

11. $4x^2 - 15x + 9$

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

2. $2x^2 - 17x + 35$

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

12. $4x^2 - 19x - 63$

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

3. $4x^2 - 4x - 15$

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

13. $2x^2 + 5x - 18$

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

4. $2x^2 - 11x - 40$

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

14. $4x^2 - 41x + 45$

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

5. $3x^2 - 25x + 8$

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

15. $3x^2 + 19x + 28$

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

6. $3x^2 - 32x + 64$

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

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

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

7. $2x^2 - 15x + 27$

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

17. $3x^2 - 14x + 16$

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

8. $4x^2 + 17x - 42$

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

18. $4x^2 - 28x + 45$

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

9. $4x^2 - 11x + 6$

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

19. $4x^2 + 8x - 5$

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

10. $2x^2 - 17x + 8$

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

20. $4x^2 + x - 18$

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

Factoring Quadratic Expressions (E)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 - 12x - 7$

11. $4x^2 - 13x - 35$

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

12. $3x^2 - 8x + 5$

3. $2x^2 + 13x + 21$

13. $3x^2 + 19x - 14$

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

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

5. $3x^2 + 2x - 1$

15. $2x^2 - 17x + 36$

6. $4x^2 + 17x + 4$

16. $4x^2 - 3x - 10$

7. $4x^2 - 28x + 45$

17. $x^2 - 8x + 12$

8. $4x^2 + 39x + 27$

18. $2x^2 - 15x + 28$

9. $3x^2 - 32x + 64$

19. $4x^2 - 4x - 35$

10. $2x^2 - 19x + 24$

20. $4x^2 - 9x - 9$

Factoring Quadratic Expressions (E) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 - 12x - 7$

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

11. $4x^2 - 13x - 35$

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

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

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

12. $3x^2 - 8x + 5$

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

3. $2x^2 + 13x + 21$

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

13. $3x^2 + 19x - 14$

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

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

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

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

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

5. $3x^2 + 2x - 1$

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

15. $2x^2 - 17x + 36$

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

6. $4x^2 + 17x + 4$

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

16. $4x^2 - 3x - 10$

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

7. $4x^2 - 28x + 45$

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

17. $x^2 - 8x + 12$

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

8. $4x^2 + 39x + 27$

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

18. $2x^2 - 15x + 28$

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

9. $3x^2 - 32x + 64$

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

19. $4x^2 - 4x - 35$

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

10. $2x^2 - 19x + 24$

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

20. $4x^2 - 9x - 9$

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

Factoring Quadratic Expressions (F)

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 7x + 5$

11. $3x^2 + x - 14$

2. $4x^2 - 37x + 9$

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

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

13. $3x^2 + 20x - 32$

4. $2x^2 + 11x - 40$

14. $2x^2 + 3x - 5$

5. $x^2 - 4x - 32$

15. $3x^2 - 8x - 35$

6. $4x^2 - 15x - 54$

16. $3x^2 - 22x + 7$

7. $3x^2 - 23x - 36$

17. $4x^2 + 4x - 3$

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

18. $2x^2 + 3x + 1$

9. $4x^2 - 4x + 1$

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

10. $4x^2 + 16x + 15$

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

Factoring Quadratic Expressions (F) Answers

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 7x + 5$

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

11. $3x^2 + x - 14$

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

2. $4x^2 - 37x + 9$

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

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

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

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

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

13. $3x^2 + 20x - 32$

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

4. $2x^2 + 11x - 40$

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

14. $2x^2 + 3x - 5$

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

5. $x^2 - 4x - 32$

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

15. $3x^2 - 8x - 35$

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

6. $4x^2 - 15x - 54$

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

16. $3x^2 - 22x + 7$

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

7. $3x^2 - 23x - 36$

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

17. $4x^2 + 4x - 3$

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

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

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

18. $2x^2 + 3x + 1$

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

9. $4x^2 - 4x + 1$

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

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

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

10. $4x^2 + 16x + 15$

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

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

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

Factoring Quadratic Expressions (G)

Name: _____

Date: _____

Factor each expression.

$$1. \ 3x^2 - 23x + 14$$

$$11. \ 3x^2 + 8x - 3$$

$$2. \ 4x^2 + 24x + 27$$

$$12. \ 3x^2 - 34x + 63$$

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

$$13. \ 3x^2 - 2x - 21$$

$$4. \ 2x^2 + 9x + 9$$

$$14. \ 3x^2 - 8x - 35$$

$$5. \ 4x^2 + 17x + 4$$

$$15. \ x^2 - 16x + 64$$

$$6. \ 3x^2 + 19x - 72$$

$$16. \ 4x^2 - 19x - 30$$

$$7. \ 4x^2 - 17x + 18$$

$$17. \ 4x^2 + 33x - 27$$

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

$$18. \ 3x^2 - 10x - 48$$

$$9. \ 4x^2 - 23x + 15$$

$$19. \ x^2 + 13x + 40$$

$$10. \ 2x^2 + 7x - 9$$

$$20. \ 3x^2 + x - 10$$

Factoring Quadratic Expressions (G) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 - 23x + 14$

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

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

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

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

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

12. $3x^2 - 34x + 63$

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

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

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

13. $3x^2 - 2x - 21$

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

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

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

14. $3x^2 - 8x - 35$

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

5. $4x^2 + 17x + 4$

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

15. $x^2 - 16x + 64$

$(x - 8)(x - 8) = (x - 8)^2$

6. $3x^2 + 19x - 72$

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

16. $4x^2 - 19x - 30$

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

7. $4x^2 - 17x + 18$

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

17. $4x^2 + 33x - 27$

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

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

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

18. $3x^2 - 10x - 48$

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

9. $4x^2 - 23x + 15$

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

19. $x^2 + 13x + 40$

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

10. $2x^2 + 7x - 9$

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

20. $3x^2 + x - 10$

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

Factoring Quadratic Expressions (H)

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 17x + 21$

11. $4x^2 - 27x + 18$

2. $x^2 + x - 42$

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

3. $4x^2 - 41x + 72$

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

4. $2x^2 + 11x + 15$

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

5. $x^2 - 12x + 27$

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

6. $2x^2 - 11x + 12$

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

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

17. $4x^2 - 12x + 5$

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

18. $4x^2 + 5x - 21$

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

19. $3x^2 + 17x - 28$

10. $2x^2 + 21x + 40$

20. $4x^2 + 43x + 63$

Factoring Quadratic Expressions (H) Answers

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 17x + 21$

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

2. $x^2 + x - 42$

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

3. $4x^2 - 41x + 72$

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

4. $2x^2 + 11x + 15$

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

5. $x^2 - 12x + 27$

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

6. $2x^2 - 11x + 12$

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

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

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

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

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

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

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

10. $2x^2 + 21x + 40$

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

11. $4x^2 - 27x + 18$

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

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

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

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

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

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

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

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

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

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

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

17. $4x^2 - 12x + 5$

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

18. $4x^2 + 5x - 21$

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

19. $3x^2 + 17x - 28$

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

20. $4x^2 + 43x + 63$

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

Factoring Quadratic Expressions (I)

Name: _____

Date: _____

Factor each expression.

1. $3x^2 + 26x + 16$

11. $2x^2 - 23x + 56$

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

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

3. $2x^2 - 13x + 6$

13. $4x^2 + 25x + 36$

4. $4x^2 + 27x + 35$

14. $3x^2 + 16x + 21$

5. $3x^2 + x - 24$

15. $4x^2 - 9x + 5$

6. $2x^2 + 9x + 4$

16. $3x^2 + 11x + 10$

7. $3x^2 + 11x + 6$

17. $4x^2 - 31x - 45$

8. $2x^2 - 7x - 9$

18. $4x^2 - 27x + 35$

9. $3x^2 + 32x + 64$

19. $3x^2 - 17x - 6$

10. $4x^2 - 21x + 20$

20. $4x^2 - 29x - 63$

Factoring Quadratic Expressions (I) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 + 26x + 16$

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

11. $2x^2 - 23x + 56$

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

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

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

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

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

3. $2x^2 - 13x + 6$

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

13. $4x^2 + 25x + 36$

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

4. $4x^2 + 27x + 35$

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

14. $3x^2 + 16x + 21$

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

5. $3x^2 + x - 24$

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

15. $4x^2 - 9x + 5$

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

6. $2x^2 + 9x + 4$

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

16. $3x^2 + 11x + 10$

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

7. $3x^2 + 11x + 6$

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

17. $4x^2 - 31x - 45$

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

8. $2x^2 - 7x - 9$

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

18. $4x^2 - 27x + 35$

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

9. $3x^2 + 32x + 64$

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

19. $3x^2 - 17x - 6$

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

10. $4x^2 - 21x + 20$

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

20. $4x^2 - 29x - 63$

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

Factoring Quadratic Expressions (J)

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 3x - 9$

11. $4x^2 + 23x + 28$

2. $2x^2 - x - 1$

12. $4x^2 + 19x - 30$

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

13. $2x^2 - 9x + 10$

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

14. $3x^2 + 10x + 8$

5. $x^2 + 8x + 15$

15. $2x^2 - 17x + 36$

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

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

7. $3x^2 - 8x + 4$

17. $4x^2 - 37x + 9$

8. $4x^2 - 31x - 45$

18. $4x^2 - 7x - 15$

9. $4x^2 + 12x + 5$

19. $2x^2 - 13x + 6$

10. $x^2 - 13x + 42$

20. $4x^2 - 24x + 35$

Factoring Quadratic Expressions (J) Answers

Name: _____

Date: _____

Factor each expression.

1. $2x^2 - 3x - 9$

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

11. $4x^2 + 23x + 28$

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

2. $2x^2 - x - 1$

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

12. $4x^2 + 19x - 30$

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

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

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

13. $2x^2 - 9x + 10$

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

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

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

14. $3x^2 + 10x + 8$

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

5. $x^2 + 8x + 15$

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

15. $2x^2 - 17x + 36$

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

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

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

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

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

7. $3x^2 - 8x + 4$

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

17. $4x^2 - 37x + 9$

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

8. $4x^2 - 31x - 45$

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

18. $4x^2 - 7x - 15$

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

9. $4x^2 + 12x + 5$

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

19. $2x^2 - 13x + 6$

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

10. $x^2 - 13x + 42$

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

20. $4x^2 - 24x + 35$

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