

Factoring Quadratic Expressions (A)

Name: _____

Date: _____

Factor each expression.

1. $2x^2 + 9x + 7$

11. $3x^2 - 13x - 10$

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

12. $2x^2 - 11x - 40$

3. $5x^2 - 39x + 28$

13. $5x^2 - 32x + 12$

4. $3x^2 + 26x - 9$

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

5. $3x^2 - x - 10$

15. $5x^2 - 39x - 54$

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

16. $4x^2 - x - 5$

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

17. $2x^2 + 13x + 20$

8. $4x^2 - 15x + 9$

18. $5x^2 - 22x + 21$

9. $3x^2 - 13x + 4$

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

10. $4x^2 - 33x + 8$

20. $3x^2 + 19x + 28$

Factoring Quadratic Expressions (A) Answers

Name: _____

Date: _____

Factor each expression.

1. $2x^2 + 9x + 7$

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

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

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

3. $5x^2 - 39x + 28$

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

4. $3x^2 + 26x - 9$

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

5. $3x^2 - x - 10$

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

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

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

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

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

8. $4x^2 - 15x + 9$

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

9. $3x^2 - 13x + 4$

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

10. $4x^2 - 33x + 8$

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

11. $3x^2 - 13x - 10$

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

12. $2x^2 - 11x - 40$

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

13. $5x^2 - 32x + 12$

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

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

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

15. $5x^2 - 39x - 54$

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

16. $4x^2 - x - 5$

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

17. $2x^2 + 13x + 20$

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

18. $5x^2 - 22x + 21$

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

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

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

20. $3x^2 + 19x + 28$

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

Factoring Quadratic Expressions (B)

Name: _____

Date: _____

Factor each expression.

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

11. $4x^2 - 25x - 21$

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

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

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

13. $5x^2 - x - 4$

4. $3x^2 - 14x + 16$

14. $5x^2 - 31x + 30$

5. $4x^2 - 23x - 72$

15. $2x^2 - 11x + 14$

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

16. $5x^2 - 3x - 14$

7. $3x^2 - 10x - 48$

17. $3x^2 - 23x + 40$

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

18. $2x^2 - 7x + 3$

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

19. $3x^2 - 28x + 32$

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

20. $4x^2 - 13x + 9$

Factoring Quadratic Expressions (B) Answers

Name: _____

Date: _____

Factor each expression.

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

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

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

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

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

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

4. $3x^2 - 14x + 16$

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

5. $4x^2 - 23x - 72$

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

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

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

7. $3x^2 - 10x - 48$

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

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

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

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

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

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

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

11. $4x^2 - 25x - 21$

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

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

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

13. $5x^2 - x - 4$

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

14. $5x^2 - 31x + 30$

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

15. $2x^2 - 11x + 14$

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

16. $5x^2 - 3x - 14$

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

17. $3x^2 - 23x + 40$

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

18. $2x^2 - 7x + 3$

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

19. $3x^2 - 28x + 32$

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

20. $4x^2 - 13x + 9$

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

Factoring Quadratic Expressions (C)

Name: _____

Date: _____

Factor each expression.

1. $5x^2 - 11x + 2$

11. $4x^2 + 23x - 6$

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

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

3. $4x^2 - 23x + 15$

13. $4x^2 + 29x + 30$

4. $2x^2 + 11x - 21$

14. $4x^2 + 31x + 42$

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

15. $2x^2 - 21x + 40$

6. $4x^2 + 11x - 45$

16. $3x^2 - 29x + 40$

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

17. $2x^2 + 9x - 35$

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

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

9. $5x^2 - 29x - 42$

19. $5x^2 - 46x + 9$

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

20. $5x^2 + 38x + 21$

Factoring Quadratic Expressions (C) Answers

Name: _____

Date: _____

Factor each expression.

1. $5x^2 - 11x + 2$

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

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

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

3. $4x^2 - 23x + 15$

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

4. $2x^2 + 11x - 21$

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

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

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

6. $4x^2 + 11x - 45$

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

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

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

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

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

9. $5x^2 - 29x - 42$

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

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

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

11. $4x^2 + 23x - 6$

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

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

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

13. $4x^2 + 29x + 30$

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

14. $4x^2 + 31x + 42$

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

15. $2x^2 - 21x + 40$

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

16. $3x^2 - 29x + 40$

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

17. $2x^2 + 9x - 35$

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

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

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

19. $5x^2 - 46x + 9$

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

20. $5x^2 + 38x + 21$

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

Factoring Quadratic Expressions (D)

Name: _____

Date: _____

Factor each expression.

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

11. $4x^2 + 7x - 15$

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

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

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

13. $2x^2 - 11x + 14$

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

14. $5x^2 - 31x - 72$

5. $4x^2 + 16x + 15$

15. $2x^2 + 11x - 40$

6. $3x^2 - 25x - 18$

16. $4x^2 - 20x + 9$

7. $5x^2 - 19x - 4$

17. $2x^2 - 15x + 27$

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

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

9. $4x^2 - 8x - 21$

19. $2x^2 - 9x - 81$

10. $4x^2 + 33x + 35$

20. $4x^2 - 13x + 9$

Factoring Quadratic Expressions (D) Answers

Name: _____

Date: _____

Factor each expression.

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

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

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

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

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

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

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

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

5. $4x^2 + 16x + 15$

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

6. $3x^2 - 25x - 18$

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

7. $5x^2 - 19x - 4$

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

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

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

9. $4x^2 - 8x - 21$

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

10. $4x^2 + 33x + 35$

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

11. $4x^2 + 7x - 15$

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

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

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

13. $2x^2 - 11x + 14$

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

14. $5x^2 - 31x - 72$

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

15. $2x^2 + 11x - 40$

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

16. $4x^2 - 20x + 9$

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

17. $2x^2 - 15x + 27$

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

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

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

19. $2x^2 - 9x - 81$

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

20. $4x^2 - 13x + 9$

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

Factoring Quadratic Expressions (E)

Name: _____

Date: _____

Factor each expression.

1. $3x^2 - 13x + 14$

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

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

12. $4x^2 - 11x + 6$

3. $5x^2 - 13x + 8$

13. $5x^2 - 27x - 56$

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

14. $3x^2 - 11x + 10$

5. $4x^2 + 20x + 9$

15. $5x^2 + 2x - 3$

6. $5x^2 + 16x + 3$

16. $4x^2 - 24x + 27$

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

17. $4x^2 + 19x - 30$

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

18. $3x^2 - 29x + 18$

9. $2x^2 - 17x + 36$

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

10. $5x^2 + 11x - 12$

20. $3x^2 - 22x - 16$

Factoring Quadratic Expressions (E) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 - 13x + 14$

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

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

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

3. $5x^2 - 13x + 8$

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

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

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

5. $4x^2 + 20x + 9$

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

6. $5x^2 + 16x + 3$

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

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

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

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

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

9. $2x^2 - 17x + 36$

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

10. $5x^2 + 11x - 12$

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

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

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

12. $4x^2 - 11x + 6$

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

13. $5x^2 - 27x - 56$

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

14. $3x^2 - 11x + 10$

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

15. $5x^2 + 2x - 3$

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

16. $4x^2 - 24x + 27$

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

17. $4x^2 + 19x - 30$

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

18. $3x^2 - 29x + 18$

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

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

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

20. $3x^2 - 22x - 16$

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

Factoring Quadratic Expressions (F)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 23x + 28$

11. $4x^2 + 31x - 45$

2. $2x^2 - 11x - 21$

12. $4x^2 - 35x + 49$

3. $5x^2 - 9x + 4$

13. $4x^2 + 31x + 42$

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

14. $2x^2 - 17x + 21$

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

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

6. $2x^2 - 3x + 1$

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

7. $5x^2 - 44x - 9$

17. $4x^2 - 19x - 5$

8. $3x^2 - 11x - 4$

18. $x^2 + 6x - 27$

9. $2x^2 + 3x - 27$

19. $3x^2 - 7x + 4$

10. $5x^2 - 34x + 45$

20. $5x^2 + 53x + 72$

Factoring Quadratic Expressions (F) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 23x + 28$

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

2. $2x^2 - 11x - 21$

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

3. $5x^2 - 9x + 4$

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

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

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

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

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

6. $2x^2 - 3x + 1$

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

7. $5x^2 - 44x - 9$

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

8. $3x^2 - 11x - 4$

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

9. $2x^2 + 3x - 27$

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

10. $5x^2 - 34x + 45$

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

11. $4x^2 + 31x - 45$

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

12. $4x^2 - 35x + 49$

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

13. $4x^2 + 31x + 42$

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

14. $2x^2 - 17x + 21$

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

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

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

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

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

17. $4x^2 - 19x - 5$

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

18. $x^2 + 6x - 27$

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

19. $3x^2 - 7x + 4$

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

20. $5x^2 + 53x + 72$

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

Factoring Quadratic Expressions (G)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 15x - 54$

11. $3x^2 + 25x + 42$

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

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

3. $4x^2 + 19x - 63$

13. $4x^2 - 39x + 27$

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

14. $5x^2 - 24x - 36$

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

15. $3x^2 + 17x + 10$

6. $4x^2 - 4x - 35$

16. $3x^2 + 19x + 6$

7. $4x^2 + 21x - 18$

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

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

18. $2x^2 + 19x + 35$

9. $2x^2 + 13x + 15$

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

10. $3x^2 - 26x + 16$

20. $4x^2 - 39x + 56$

Factoring Quadratic Expressions (G) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 + 15x - 54$

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

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

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

3. $4x^2 + 19x - 63$

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

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

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

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

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

6. $4x^2 - 4x - 35$

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

7. $4x^2 + 21x - 18$

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

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

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

9. $2x^2 + 13x + 15$

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

10. $3x^2 - 26x + 16$

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

11. $3x^2 + 25x + 42$

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

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

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

13. $4x^2 - 39x + 27$

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

14. $5x^2 - 24x - 36$

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

15. $3x^2 + 17x + 10$

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

16. $3x^2 + 19x + 6$

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

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

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

18. $2x^2 + 19x + 35$

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

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

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

20. $4x^2 - 39x + 56$

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

Factoring Quadratic Expressions (H)

Name: _____

Date: _____

Factor each expression.

1. $3x^2 + 25x - 18$

11. $3x^2 - 17x + 10$

2. $4x^2 + 20x + 25$

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

3. $5x^2 - 28x - 49$

13. $4x^2 - 5x - 6$

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

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

5. $4x^2 - 20x + 21$

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

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

16. $4x^2 - 24x + 35$

7. $3x^2 + 11x + 10$

17. $5x^2 - 3x - 2$

8. $4x^2 - 13x + 3$

18. $2x^2 - 11x - 21$

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

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

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

20. $3x^2 - 7x + 4$

Factoring Quadratic Expressions (H) Answers

Name: _____

Date: _____

Factor each expression.

1. $3x^2 + 25x - 18$

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

2. $4x^2 + 20x + 25$

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

3. $5x^2 - 28x - 49$

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

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

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

5. $4x^2 - 20x + 21$

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

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

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

7. $3x^2 + 11x + 10$

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

8. $4x^2 - 13x + 3$

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

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

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

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

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

11. $3x^2 - 17x + 10$

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

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

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

13. $4x^2 - 5x - 6$

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

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

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

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

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

16. $4x^2 - 24x + 35$

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

17. $5x^2 - 3x - 2$

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

18. $2x^2 - 11x - 21$

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

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

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

20. $3x^2 - 7x + 4$

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

Factoring Quadratic Expressions (I)

Name: _____

Date: _____

Factor each expression.

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

11. $x^2 - 3x - 54$

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

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

3. $4x^2 + 12x + 5$

13. $4x^2 - 11x + 6$

4. $5x^2 - 22x + 8$

14. $5x^2 + 33x + 18$

5. $4x^2 + 20x + 25$

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

6. $3x^2 - 8x - 16$

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

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

17. $2x^2 + 11x + 9$

8. $5x^2 + 36x + 36$

18. $4x^2 - 5x - 6$

9. $5x^2 + 42x - 27$

19. $5x^2 - 11x - 12$

10. $4x^2 + 16x + 7$

20. $3x^2 + 19x - 14$

Factoring Quadratic Expressions (I) Answers

Name: _____

Date: _____

Factor each expression.

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

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

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

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

3. $4x^2 + 12x + 5$

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

4. $5x^2 - 22x + 8$

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

5. $4x^2 + 20x + 25$

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

6. $3x^2 - 8x - 16$

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

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

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

8. $5x^2 + 36x + 36$

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

9. $5x^2 + 42x - 27$

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

10. $4x^2 + 16x + 7$

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

11. $x^2 - 3x - 54$

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

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

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

13. $4x^2 - 11x + 6$

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

14. $5x^2 + 33x + 18$

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

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

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

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

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

17. $2x^2 + 11x + 9$

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

18. $4x^2 - 5x - 6$

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

19. $5x^2 - 11x - 12$

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

20. $3x^2 + 19x - 14$

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

Factoring Quadratic Expressions (J)

Name: _____

Date: _____

Factor each expression.

1. $4x^2 - 19x + 12$

11. $4x^2 - 81$

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

12. $4x^2 - 39x + 27$

3. $5x^2 - 19x - 30$

13. $4x^2 - 8x - 5$

4. $5x^2 + 2x - 16$

14. $5x^2 - 16x + 12$

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

15. $5x^2 + 31x - 28$

6. $3x^2 - 20x - 32$

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

7. $5x^2 - 39x + 54$

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

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

18. $4x^2 + 8x + 3$

9. $x^2 - 36$

19. $2x^2 + 13x - 45$

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

20. $4x^2 - 16x + 7$

Factoring Quadratic Expressions (J) Answers

Name: _____

Date: _____

Factor each expression.

1. $4x^2 - 19x + 12$

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

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

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

3. $5x^2 - 19x - 30$

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

4. $5x^2 + 2x - 16$

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

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

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

6. $3x^2 - 20x - 32$

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

7. $5x^2 - 39x + 54$

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

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

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

9. $x^2 - 36$

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

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

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

11. $4x^2 - 81$

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

12. $4x^2 - 39x + 27$

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

13. $4x^2 - 8x - 5$

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

14. $5x^2 - 16x + 12$

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

15. $5x^2 + 31x - 28$

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

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

$(x - 7)(x - 7) = (x - 7)^2$

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

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

18. $4x^2 + 8x + 3$

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

19. $2x^2 + 13x - 45$

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

20. $4x^2 - 16x + 7$

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