

Factoring Quadratic Expressions (F)

Name: _____

Date: _____

Factor each expression.

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

11. $3x^2 - 13x - 30$

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

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

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

13. $-4x^2 + 31x + 8$

4. $3x^2 - 8x + 5$

14. $3x^2 - 17x + 10$

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

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

6. $-3x^2 + 4x + 7$

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

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

17. $-3x^2 + 19x + 40$

8. $x^2 + 11x + 24$

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

9. $2x^2 - 3x - 54$

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

10. $4x^2 - 12x + 9$

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

Factoring Quadratic Expressions (F) Answers

Name: _____

Date: _____

Factor each expression.

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

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

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

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

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

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

4. $3x^2 - 8x + 5$

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

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

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

6. $-3x^2 + 4x + 7$

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

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

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

8. $x^2 + 11x + 24$

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

9. $2x^2 - 3x - 54$

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

10. $4x^2 - 12x + 9$

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

11. $3x^2 - 13x - 30$

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

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

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

13. $-4x^2 + 31x + 8$

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

14. $3x^2 - 17x + 10$

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

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

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

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

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

17. $-3x^2 + 19x + 40$

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

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

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

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

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

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

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