

Factoring Quadratic Expressions (F)

Name: _____

Date: _____

Factor each expression.

1. $-10x^2 + 45x + 90$

11. $-25x^2 - 115x + 210$

2. $-15x^2 - 20x + 35$

12. $-8x^2 + 24x + 14$

3. $12x^2 - 96x + 189$

13. $-12x^2 + 39x + 105$

4. $-20x^2 - 105x - 135$

14. $-20x^2 + 5x + 25$

5. $6x^2 - 3x - 30$

15. $-12x^2 + 24x + 135$

6. $15x^2 + 145x + 200$

16. $-6x^2 + 3x + 84$

7. $6x^2 - 45x + 75$

17. $12x^2 - 81x - 243$

8. $20x^2 + 112x + 128$

18. $-25x^2 + 165x + 70$

9. $-16x^2 + 324$

19. $6x^2 - 64x + 128$

10. $15x^2 - 10x - 40$

20. $20x^2 - 25x - 30$

Factoring Quadratic Expressions (F) Answers

Name: _____

Date: _____

Factor each expression.

1. $-10x^2 + 45x + 90$

$-5(2x + 3)(x - 6)$

2. $-15x^2 - 20x + 35$

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

3. $12x^2 - 96x + 189$

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

4. $-20x^2 - 105x - 135$

$-5(x + 3)(4x + 9)$

5. $6x^2 - 3x - 30$

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

6. $15x^2 + 145x + 200$

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

7. $6x^2 - 45x + 75$

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

8. $20x^2 + 112x + 128$

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

9. $-16x^2 + 324$

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

10. $15x^2 - 10x - 40$

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

11. $-25x^2 - 115x + 210$

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

12. $-8x^2 + 24x + 14$

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

13. $-12x^2 + 39x + 105$

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

14. $-20x^2 + 5x + 25$

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

15. $-12x^2 + 24x + 135$

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

16. $-6x^2 + 3x + 84$

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

17. $12x^2 - 81x - 243$

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

18. $-25x^2 + 165x + 70$

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

19. $6x^2 - 64x + 128$

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

20. $20x^2 - 25x - 30$

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