

Factoring Quadratic Expressions (H)

Name: _____

Date: _____

Factor each expression.

1. $-6x^2 - 63x - 120$

11. $16x^2 - 108x - 160$

2. $-12x^2 + 129x - 189$

12. $-16x^2 - 116x + 96$

3. $12x^2 - 48x + 21$

13. $-20x^2 - 15x + 35$

4. $15x^2 + 25x - 10$

14. $-5x^2 - 40x + 45$

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

15. $-2x^2 - 14x - 24$

6. $-15x^2 - 55x - 30$

16. $16x^2 + 100x + 144$

7. $-4x^2 + 10x + 36$

17. $-12x^2 - 76x - 24$

8. $-8x^2 + 38x - 42$

18. $20x^2 - 35x - 75$

9. $12x^2 - 80x + 128$

19. $6x^2 - 21x - 45$

10. $-16x^2 + 28x + 8$

20. $-4x^2 + 18x + 162$

Factoring Quadratic Expressions (H) Answers

Name: _____

Date: _____

Factor each expression.

1. $-6x^2 - 63x - 120$

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

2. $-12x^2 + 129x - 189$

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

3. $12x^2 - 48x + 21$

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

4. $15x^2 + 25x - 10$

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

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

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

6. $-15x^2 - 55x - 30$

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

7. $-4x^2 + 10x + 36$

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

8. $-8x^2 + 38x - 42$

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

9. $12x^2 - 80x + 128$

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

10. $-16x^2 + 28x + 8$

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

11. $16x^2 - 108x - 160$

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

12. $-16x^2 - 116x + 96$

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

13. $-20x^2 - 15x + 35$

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

14. $-5x^2 - 40x + 45$

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

15. $-2x^2 - 14x - 24$

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

16. $16x^2 + 100x + 144$

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

17. $-12x^2 - 76x - 24$

$-4(3x + 1)(x + 6)$

18. $20x^2 - 35x - 75$

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

19. $6x^2 - 21x - 45$

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

20. $-4x^2 + 18x + 162$

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