

# Factoring Quadratic Expressions (G)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Factor each expression.

1.  $10x^2 + 25x - 125$

11.  $-12x^2 + 20x + 48$

2.  $-9x^2 + 42x - 24$

12.  $-10x^2 + 24x + 18$

3.  $-6x^2 + 52x - 96$

13.  $-5x^2 - 45x - 100$

4.  $10x^2 - 68x + 90$

14.  $-8x^2 - 8x + 6$

5.  $15x^2 + 63x - 60$

15.  $-3x^2 - 24x - 21$

6.  $6x^2 + 3x - 9$

16.  $-20x^2 + 148x - 56$

7.  $20x^2 - 45x - 45$

17.  $15x^2 + 55x - 20$

8.  $-15x^2 + 35x - 20$

18.  $12x^2 - 63x - 147$

9.  $10x^2 + 66x + 80$

19.  $-15x^2 + 155x - 180$

10.  $6x^2 + 57x + 135$

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

# Factoring Quadratic Expressions (G) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Factor each expression.

1.  $10x^2 + 25x - 125$

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

2.  $-9x^2 + 42x - 24$

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

3.  $-6x^2 + 52x - 96$

$-2(3x - 8)(x - 6)$

4.  $10x^2 - 68x + 90$

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

5.  $15x^2 + 63x - 60$

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

6.  $6x^2 + 3x - 9$

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

7.  $20x^2 - 45x - 45$

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

8.  $-15x^2 + 35x - 20$

$-5(3x - 4)(x - 1)$

9.  $10x^2 + 66x + 80$

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

10.  $6x^2 + 57x + 135$

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

11.  $-12x^2 + 20x + 48$

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

12.  $-10x^2 + 24x + 18$

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

13.  $-5x^2 - 45x - 100$

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

14.  $-8x^2 - 8x + 6$

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

15.  $-3x^2 - 24x - 21$

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

16.  $-20x^2 + 148x - 56$

$-4(5x - 2)(x - 7)$

17.  $15x^2 + 55x - 20$

$5(3x - 1)(x + 4)$

18.  $12x^2 - 63x - 147$

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

19.  $-15x^2 + 155x - 180$

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

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

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