

# Factoring Quadratic Expressions (G)

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

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

Factor each expression.

1.  $8x^2 - 46x + 63$

11.  $5x^2 + 29x - 42$

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

12.  $-x^2 + x + 30$

3.  $-3x^2 - 14x + 24$

13.  $-4x^2 - 3x + 27$

4.  $-7x^2 + 40x + 12$

14.  $-2x^2 - 9x - 7$

5.  $4x^2 + 3x - 7$

15.  $-5x^2 + 37x + 24$

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

16.  $4x^2 - 3x - 27$

7.  $6x^2 + 35x + 36$

17.  $-5x^2 - 33x - 40$

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

18.  $-7x^2 - 10x + 8$

9.  $4x^2 - 16x + 15$

19.  $-7x^2 - 38x + 24$

10.  $5x^2 + 39x - 8$

20.  $-4x^2 + 23x + 35$

# Factoring Quadratic Expressions (G) Answers

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

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

Factor each expression.

1.  $8x^2 - 46x + 63$

$(2x - 7)(4x - 9)$

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

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

3.  $-3x^2 - 14x + 24$

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

4.  $-7x^2 + 40x + 12$

$-(7x + 2)(x - 6)$

5.  $4x^2 + 3x - 7$

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

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

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

7.  $6x^2 + 35x + 36$

$(3x + 4)(2x + 9)$

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

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

9.  $4x^2 - 16x + 15$

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

10.  $5x^2 + 39x - 8$

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

11.  $5x^2 + 29x - 42$

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

12.  $-x^2 + x + 30$

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

13.  $-4x^2 - 3x + 27$

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

14.  $-2x^2 - 9x - 7$

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

15.  $-5x^2 + 37x + 24$

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

16.  $4x^2 - 3x - 27$

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

17.  $-5x^2 - 33x - 40$

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

18.  $-7x^2 - 10x + 8$

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

19.  $-7x^2 - 38x + 24$

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

20.  $-4x^2 + 23x + 35$

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