

# Factoring Quadratic Expressions (J)

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

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

Factor each expression.

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

11.  $-x^2 - 6x + 16$

2.  $x^2 - x - 12$

12.  $x^2 - 8x + 7$

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

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

4.  $x^2 - 5x - 6$

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

5.  $-x^2 + 9x - 14$

15.  $x^2 - 10x + 9$

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

16.  $x^2 + 7x - 18$

7.  $-x^2 + 49$

17.  $x^2 - x - 42$

8.  $x^2 + x - 20$

18.  $x^2 - 15x + 56$

9.  $-x^2 + 17x - 72$

19.  $-x^2 - 4x - 3$

10.  $-x^2 - 15x - 56$

20.  $x^2 - 12x + 35$

# Factoring Quadratic Expressions (J) Answers

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

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

Factor each expression.

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

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

2.  $x^2 - x - 12$

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

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

$-(x - 8)(x + 6)$

4.  $x^2 - 5x - 6$

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

5.  $-x^2 + 9x - 14$

$-(x - 2)(x - 7)$

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

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

7.  $-x^2 + 49$

$-(x + 7)(x - 7)$

8.  $x^2 + x - 20$

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

9.  $-x^2 + 17x - 72$

$-(x - 9)(x - 8)$

10.  $-x^2 - 15x - 56$

$-(x + 7)(x + 8)$

11.  $-x^2 - 6x + 16$

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

12.  $x^2 - 8x + 7$

$(x - 1)(x - 7)$

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

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

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

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

15.  $x^2 - 10x + 9$

$(x - 1)(x - 9)$

16.  $x^2 + 7x - 18$

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

17.  $x^2 - x - 42$

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

18.  $x^2 - 15x + 56$

$(x - 7)(x - 8)$

19.  $-x^2 - 4x - 3$

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

20.  $x^2 - 12x + 35$

$(x - 7)(x - 5)$