

# Factoring Quadratic Expressions (C)

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

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

Factor each expression.

1.  $-2x^2 - 2x + 112$

11.  $-2x^2 - 4x + 6$

2.  $3x^2 + 36x + 81$

12.  $4x^2 - 44x + 72$

3.  $4x^2 + 24x + 36$

13.  $3x^2 - 75$

4.  $-5x^2 + 10x + 240$

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

5.  $-4x^2 - 44x - 112$

15.  $-2x^2 - 4x + 126$

6.  $2x^2 + 18x + 40$

16.  $4x^2 + 48x + 108$

7.  $4x^2 - 8x - 96$

17.  $3x^2 - 3$

8.  $-5x^2 - 5x + 210$

18.  $-4x^2 - 36x - 32$

9.  $-2x^2 + 10x + 48$

19.  $-5x^2 - 10x + 15$

10.  $-3x^2 + 33x - 72$

20.  $2x^2 + 2x - 60$

# Factoring Quadratic Expressions (C) Answers

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

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

Factor each expression.

1.  $-2x^2 - 2x + 112$

$-2(x - 7)(x + 8)$

2.  $3x^2 + 36x + 81$

$3(x + 9)(x + 3)$

3.  $4x^2 + 24x + 36$

$4(x + 3)(x + 3) = 4(x + 3)^2$

4.  $-5x^2 + 10x + 240$

$-5(x - 8)(x + 6)$

5.  $-4x^2 - 44x - 112$

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

6.  $2x^2 + 18x + 40$

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

7.  $4x^2 - 8x - 96$

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

8.  $-5x^2 - 5x + 210$

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

9.  $-2x^2 + 10x + 48$

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

10.  $-3x^2 + 33x - 72$

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

11.  $-2x^2 - 4x + 6$

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

12.  $4x^2 - 44x + 72$

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

13.  $3x^2 - 75$

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

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

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

15.  $-2x^2 - 4x + 126$

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

16.  $4x^2 + 48x + 108$

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

17.  $3x^2 - 3$

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

18.  $-4x^2 - 36x - 32$

$-4(x + 1)(x + 8)$

19.  $-5x^2 - 10x + 15$

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

20.  $2x^2 + 2x - 60$

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