

# Factoring Quadratic Expressions (A)

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

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

Factor each expression.

1.  $-4x^2 + 32x - 48$

11.  $-16x^2 + 100$

2.  $12x^2 - 28x + 8$

12.  $-10x^2 - 5x + 180$

3.  $2x^2 - 4x - 96$

13.  $-15x^2 - 84x + 36$

4.  $4x^2 + 26x + 30$

14.  $20x^2 - 85x + 20$

5.  $-8x^2 - 56x - 98$

15.  $12x^2 - 51x - 126$

6.  $-8x^2 + 68x - 32$

16.  $5x^2 - 15x + 10$

7.  $-12x^2 - 93x + 135$

17.  $4x^2 + 40x + 100$

8.  $-25x^2 - 110x - 40$

18.  $25x^2 + 165x - 280$

9.  $-8x^2 - 8x + 70$

19.  $12x^2 - 57x - 90$

10.  $16x^2 - 20x - 36$

20.  $-15x^2 - 78x - 15$

# Factoring Quadratic Expressions (A) Answers

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

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

Factor each expression.

1.  $-4x^2 + 32x - 48$

$-4(x - 2)(x - 6)$

2.  $12x^2 - 28x + 8$

$4(3x - 1)(x - 2)$

3.  $2x^2 - 4x - 96$

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

4.  $4x^2 + 26x + 30$

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

5.  $-8x^2 - 56x - 98$

$-2(2x + 7)(2x + 7) = -2(2x + 7)^2$

6.  $-8x^2 + 68x - 32$

$-4(x - 8)(2x - 1)$

7.  $-12x^2 - 93x + 135$

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

8.  $-25x^2 - 110x - 40$

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

9.  $-8x^2 - 8x + 70$

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

10.  $16x^2 - 20x - 36$

$4(x + 1)(4x - 9)$

11.  $-16x^2 + 100$

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

12.  $-10x^2 - 5x + 180$

$-5(2x + 9)(x - 4)$

13.  $-15x^2 - 84x + 36$

$-3(x + 6)(5x - 2)$

14.  $20x^2 - 85x + 20$

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

15.  $12x^2 - 51x - 126$

$3(x - 6)(4x + 7)$

16.  $5x^2 - 15x + 10$

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

17.  $4x^2 + 40x + 100$

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

18.  $25x^2 + 165x - 280$

$5(5x - 7)(x + 8)$

19.  $12x^2 - 57x - 90$

$3(x - 6)(4x + 5)$

20.  $-15x^2 - 78x - 15$

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