

# Factoring Quadratic Expressions (F)

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

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

Factor each expression.

1.  $-20x^2 - 115x + 175$

11.  $12x^2 + 15x - 18$

2.  $20x^2 + 160x + 315$

12.  $-6x^2 + 34x - 48$

3.  $-12x^2 - 16x + 16$

13.  $-8x^2 + 44x + 84$

4.  $-16x^2 - 140x - 96$

14.  $8x^2 - 60x + 108$

5.  $-4x^2 + 26x - 40$

15.  $16x^2 + 60x + 36$

6.  $20x^2 - 135x - 405$

16.  $20x^2 + 20x + 5$

7.  $-12x^2 + 88x + 180$

17.  $-16x^2 + 4x + 72$

8.  $12x^2 + 52x + 16$

18.  $-2x^2 + 14x + 16$

9.  $-5x^2 + 50x - 80$

19.  $12x^2 - 136x + 252$

10.  $8x^2 - 60x - 32$

20.  $6x^2 + 3x - 108$

# Factoring Quadratic Expressions (F) Answers

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

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

Factor each expression.

1.  $-20x^2 - 115x + 175$

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

2.  $20x^2 + 160x + 315$

$5(2x + 9)(2x + 7)$

3.  $-12x^2 - 16x + 16$

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

4.  $-16x^2 - 140x - 96$

$-4(4x + 3)(x + 8)$

5.  $-4x^2 + 26x - 40$

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

6.  $20x^2 - 135x - 405$

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

7.  $-12x^2 + 88x + 180$

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

8.  $12x^2 + 52x + 16$

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

9.  $-5x^2 + 50x - 80$

$-5(x - 8)(x - 2)$

10.  $8x^2 - 60x - 32$

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

11.  $12x^2 + 15x - 18$

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

12.  $-6x^2 + 34x - 48$

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

13.  $-8x^2 + 44x + 84$

$-4(2x + 3)(x - 7)$

14.  $8x^2 - 60x + 108$

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

15.  $16x^2 + 60x + 36$

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

16.  $20x^2 + 20x + 5$

$5(2x + 1)(2x + 1) = 5(2x + 1)^2$

17.  $-16x^2 + 4x + 72$

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

18.  $-2x^2 + 14x + 16$

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

19.  $12x^2 - 136x + 252$

$4(x - 9)(3x - 7)$

20.  $6x^2 + 3x - 108$

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