

# Factoring Quadratic Expressions (A)

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

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

Factor each expression.

1.  $4x^2 + 18x - 112$

11.  $-8x^2 - 48x - 70$

2.  $12x^2 - 44x - 80$

12.  $12x^2 + 44x - 80$

3.  $6x^2 + 21x - 27$

13.  $2x^2 + 6x - 8$

4.  $12x^2 + 52x - 224$

14.  $20x^2 + 215x + 315$

5.  $10x^2 - 25x - 125$

15.  $-4x^2 - 36x - 56$

6.  $-5x^2 - 60x - 135$

16.  $-16x^2 + 12x + 28$

7.  $8x^2 - 6x - 54$

17.  $15x^2 - 110x + 175$

8.  $-8x^2 + 26x - 18$

18.  $12x^2 - 40x - 32$

9.  $-16x^2 - 116x - 180$

19.  $-20x^2 - 155x + 225$

10.  $-2x^2 - 34x - 144$

20.  $-12x^2 - 32x - 16$

# Factoring Quadratic Expressions (A) Answers

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

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

Factor each expression.

1.  $4x^2 + 18x - 112$

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

2.  $12x^2 - 44x - 80$

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

3.  $6x^2 + 21x - 27$

$3(2x + 9)(x - 1)$

4.  $12x^2 + 52x - 224$

$4(3x - 8)(x + 7)$

5.  $10x^2 - 25x - 125$

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

6.  $-5x^2 - 60x - 135$

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

7.  $8x^2 - 6x - 54$

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

8.  $-8x^2 + 26x - 18$

$-2(4x - 9)(x - 1)$

9.  $-16x^2 - 116x - 180$

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

10.  $-2x^2 - 34x - 144$

$-2(x + 9)(x + 8)$

11.  $-8x^2 - 48x - 70$

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

12.  $12x^2 + 44x - 80$

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

13.  $2x^2 + 6x - 8$

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

14.  $20x^2 + 215x + 315$

$5(4x + 7)(x + 9)$

15.  $-4x^2 - 36x - 56$

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

16.  $-16x^2 + 12x + 28$

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

17.  $15x^2 - 110x + 175$

$5(x - 5)(3x - 7)$

18.  $12x^2 - 40x - 32$

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

19.  $-20x^2 - 155x + 225$

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

20.  $-12x^2 - 32x - 16$

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