

# Factoring Quadratic Expressions (J)

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

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

Factor each expression.

1.  $-35x^2 - 10x + 25$

11.  $-35x^2 + 238x + 336$

2.  $10x^2 + 65x + 105$

12.  $21x^2 - 57x + 30$

3.  $14x^2 - 77x + 35$

13.  $63x^2 + 273x + 280$

4.  $56x^2 + 539x + 315$

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

5.  $-72x^2 + 18x + 27$

15.  $-6x^2 - 2x + 48$

6.  $-32x^2 + 328x - 360$

16.  $-8x^2 - 8x + 448$

7.  $12x^2 - 69x + 84$

17.  $42x^2 + 240x - 72$

8.  $-72x^2 + 261x + 108$

18.  $-6x^2 + 70x - 144$

9.  $-54x^2 + 99x + 90$

19.  $-6x^2 + 8x + 14$

10.  $-10x^2 + 14x + 12$

20.  $10x^2 + 5x - 105$

# Factoring Quadratic Expressions (J) Answers

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

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

Factor each expression.

1.  $-35x^2 - 10x + 25$

$-5(x + 1)(7x - 5)$

2.  $10x^2 + 65x + 105$

$5(x + 3)(2x + 7)$

3.  $14x^2 - 77x + 35$

$7(x - 5)(2x - 1)$

4.  $56x^2 + 539x + 315$

$7(x + 9)(8x + 5)$

5.  $-72x^2 + 18x + 27$

$-9(4x - 3)(2x + 1)$

6.  $-32x^2 + 328x - 360$

$-8(4x - 5)(x - 9)$

7.  $12x^2 - 69x + 84$

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

8.  $-72x^2 + 261x + 108$

$-9(8x + 3)(x - 4)$

9.  $-54x^2 + 99x + 90$

$-9(2x - 5)(3x + 2)$

10.  $-10x^2 + 14x + 12$

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

11.  $-35x^2 + 238x + 336$

$-7(x - 8)(5x + 6)$

12.  $21x^2 - 57x + 30$

$3(x - 2)(7x - 5)$

13.  $63x^2 + 273x + 280$

$7(3x + 5)(3x + 8)$

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

$-2(7x + 3)(x - 1)$

15.  $-6x^2 - 2x + 48$

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

16.  $-8x^2 - 8x + 448$

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

17.  $42x^2 + 240x - 72$

$6(7x - 2)(x + 6)$

18.  $-6x^2 + 70x - 144$

$-2(x - 9)(3x - 8)$

19.  $-6x^2 + 8x + 14$

$-2(3x - 7)(x + 1)$

20.  $10x^2 + 5x - 105$

$5(x - 3)(2x + 7)$