

# Factoring Quadratic Expressions (J)

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

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

Factor each expression.

1.  $4x^2 - 30x + 54$

11.  $-10x^2 - 35x - 30$

2.  $-25x^2 + 130x + 120$

12.  $6x^2 - 57x + 126$

3.  $-10x^2 - 105x - 245$

13.  $16x^2 + 68x + 72$

4.  $4x^2 + 42x + 98$

14.  $-12x^2 + 40x - 28$

5.  $4x^2 - 54x + 162$

15.  $-15x^2 + 145x - 200$

6.  $-12x^2 - 104x + 36$

16.  $8x^2 - 28x - 60$

7.  $4x^2 + 4x - 224$

17.  $-25x^2 - 115x - 60$

8.  $10x^2 + 25x - 125$

18.  $16x^2 + 108x - 28$

9.  $-20x^2 - 152x - 84$

19.  $4x^2 + 30x + 54$

10.  $15x^2 + 96x + 105$

20.  $-6x^2 - 56x - 98$

# Factoring Quadratic Expressions (J) Answers

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

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

Factor each expression.

1.  $4x^2 - 30x + 54$

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

2.  $-25x^2 + 130x + 120$

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

3.  $-10x^2 - 105x - 245$

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

4.  $4x^2 + 42x + 98$

$2(2x + 7)(x + 7)$

5.  $4x^2 - 54x + 162$

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

6.  $-12x^2 - 104x + 36$

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

7.  $4x^2 + 4x - 224$

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

8.  $10x^2 + 25x - 125$

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

9.  $-20x^2 - 152x - 84$

$-4(5x + 3)(x + 7)$

10.  $15x^2 + 96x + 105$

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

11.  $-10x^2 - 35x - 30$

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

12.  $6x^2 - 57x + 126$

$3(x - 6)(2x - 7)$

13.  $16x^2 + 68x + 72$

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

14.  $-12x^2 + 40x - 28$

$-4(3x - 7)(x - 1)$

15.  $-15x^2 + 145x - 200$

$-5(x - 8)(3x - 5)$

16.  $8x^2 - 28x - 60$

$4(x - 5)(2x + 3)$

17.  $-25x^2 - 115x - 60$

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

18.  $16x^2 + 108x - 28$

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

19.  $4x^2 + 30x + 54$

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

20.  $-6x^2 - 56x - 98$

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