

# Factoring Quadratic Expressions (E)

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

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

Factor each expression.

1.  $270x^2 + 525x + 245$

11.  $-150x^2 + 85x - 10$

2.  $112x^2 + 46x - 90$

12.  $100x^2 - 315x + 245$

3.  $18x^2 + 98x + 40$

13.  $-120x^2 - 310x - 175$

4.  $100x^2 - 80x - 128$

14.  $-24x^2 - 42x + 45$

5.  $-18x^2 + 141x - 105$

15.  $-2x^2 + 22x - 36$

6.  $12x^2 + 40x - 100$

16.  $36x^2 + 124x - 80$

7.  $-48x^2 - 164x - 140$

17.  $100x^2 - 80x + 16$

8.  $75x^2 + 45x + 6$

18.  $125x^2 - 200x + 60$

9.  $-20x^2 + 140x - 225$

19.  $252x^2 - 200x + 32$

10.  $-32x^2 - 88x - 36$

20.  $-162x^2 - 207x - 21$

# Factoring Quadratic Expressions (E) Answers

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

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

Factor each expression.

1.  $270x^2 + 525x + 245$

$5(9x + 7)(6x + 7)$

2.  $112x^2 + 46x - 90$

$2(7x - 5)(8x + 9)$

3.  $18x^2 + 98x + 40$

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

4.  $100x^2 - 80x - 128$

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

5.  $-18x^2 + 141x - 105$

$-3(x - 7)(6x - 5)$

6.  $12x^2 + 40x - 100$

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

7.  $-48x^2 - 164x - 140$

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

8.  $75x^2 + 45x + 6$

$3(5x + 1)(5x + 2)$

9.  $-20x^2 + 140x - 225$

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

10.  $-32x^2 - 88x - 36$

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

11.  $-150x^2 + 85x - 10$

$-5(6x - 1)(5x - 2)$

12.  $100x^2 - 315x + 245$

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

13.  $-120x^2 - 310x - 175$

$-5(4x + 7)(6x + 5)$

14.  $-24x^2 - 42x + 45$

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

15.  $-2x^2 + 22x - 36$

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

16.  $36x^2 + 124x - 80$

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

17.  $100x^2 - 80x + 16$

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

18.  $125x^2 - 200x + 60$

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

19.  $252x^2 - 200x + 32$

$4(7x - 4)(9x - 2)$

20.  $-162x^2 - 207x - 21$

$-3(9x + 1)(6x + 7)$