

Name \_\_\_\_\_

Date \_\_\_\_\_

**Factor completely.**

1)  $x^2 + 2x - 48$

2)  $2x^2 - 12x + 16$

3)  $x^5 - 7x^4 - 18x^3$

4)  $x^2 + 2xy - 48y^2$

**Factor completely using the trial and error method to factor trinomials. If unfactorable, indicate that the polynomial is prime.**

5)  $2x^2 + 23x + 11$

6)  $3x^2 - 9x + 6$

7)  $3x^2 + 13x + 10$

**Factor completely using the grouping method to factor trinomials. If unfactorable, indicate that the polynomial is prime.**

8)  $3x^2 + 34x + 11$

9)  $5x^2 + 56x + 11$

10)  $3x^2 + 7x - 6$

11)  $2x^2 - 9x + 10$

12)  $3x^2 + 19x + 10$

13)  $3x^2 + 19x + 20$

14)  $20x^2 + 23x + 6$

15)  $12x^2 + 25x + 12$

## Answer Key

Testname: 7.2FACTORINGPOLYNOMIALSV02

- 1)  $(x + 8)(x - 6)$
- 2)  $2(x - 2)(x - 4)$
- 3)  $x^3(x + 2)(x - 9)$
- 4)  $(x + 8y)(x - 6y)$
- 5)  $(2x + 1)(x + 11)$
- 6)  $(3x - 3)(x - 2)$
- 7) prime
- 8)  $(3x + 1)(x + 11)$
- 9)  $(5x + 1)(x + 11)$
- 10)  $(3x - 2)(x + 3)$
- 11)  $(2x - 5)(x - 2)$
- 12) prime
- 13) prime
- 14)  $(4x + 3)(5x + 2)$
- 15)  $(4x + 3)(3x + 4)$