

Lesson 1: The Greatest Common Factor and Factoring by Grouping

Find the greatest common factor for the following set of terms.

1) y^5, y^7

2) $6x^4, 24x^7$

3) $9y^2, 6y^3, 15y^4$

4) $15ab^3, 5a^3b^4c, 15bc^4$

Factor each polynomial.

5) $8a - 24b$

6) $24a^2b - 18a^3b^2$

7) $18x^2y + 27xy - 9xy^2$

8) $2a(x - y) - 5(x - y)$

9) $5(4x - 3y) - x(4x - 3y)$

10) $c(7x - 2y) - 12(7x - 2y)$

Factor each polynomial by grouping.

11) $cx + 4c + bx + 4b$

12) $6x + 3y - 8ax - 4ay$

13) $4x^2 - 20xy + 2x - 10y$

14) $2a^2 - 8a + 3ab - 12b$