

Math 1215 Homework 6

Name.....

Simplify

1. $(-3)x^2 x^3$

4. $\frac{36x^9y^5}{18x^3y^2}$

2. $(ab^2)(a^2b^3)$

5. $\frac{-24m^6n^3}{6m^2n^2}$

3. $(-10x^4y^2)(3x^2y)$

6. $\frac{12x^5}{4x^{-2}}$

7. $a^2b^{-2}c^0$

Change the following numbers from standard form into scientific notation.

8. 62,000

9. 0.000071

Change the following numbers from scientific notation into standard form.

10. $6.1 * 10^4$

Simplify the following problems using operations with scientific notation, write your answer in both standard form and scientific notation.

11. $(2 * 10^3)(4 * 10^2)$

12. $\frac{12.4 * 10^{-4}}{4 * 10^2}$

Simplify each expression.

$$13. \quad j - 4k + 7 + 2j - 3k$$

$$14. \quad (2x^2 - 3x + 1) + (-x^2 + x - 7)$$

$$15. \quad (3x^2 - 2x) - (7x^2 - 2x + 1)$$

$$16. \quad (2n^3 + 10) - (-n^2 + 3n)$$

$$17. \quad -4x(x + 7)$$

$$18. \quad (-2m^2 - 6m + 3) + (-3m^2 + m - 1)$$

$$19. \quad (9a^2 - 2a + 2) + (5a^2 - 5a + 7)$$

20. Find the perimeter

