

Math 35 MW Practice Test 2

1. Simplify. Write your answer with descending powers.

a. $(8n^2 - 3n) - (3n^2 - n + 6)$

b. $(-6x^2 + 2x - 1) + (5x^2 - x + 1)$

2. Multiply:

a. $-3x(5x^2 + 6x - 3)$

b. $(x + 2y)(x - 2y)$

c. $9x(-4x^2)(2x^5)$

d. $(2x^3 - 1)(3x + 7)$

3. Find the prime factorization of 200.

4. Divide:

a. $\frac{-36x^4}{9x}$

b. $\frac{-21x^3 + 7x^2}{7x^2}$

5. Factor: $18x^6 - 36x^4 + 9x^3$

6. A cube measuring 3 feet along each side is to be covered with paper. What is the total area that will be covered by the paper?

7. Solve:

a. $-5x = 20$

b. $x - 2 = -2$

c. $\frac{x}{4} = -6$

d. $4x + 3 = 2x + 11$

8. Write as an algebraic expression: the product of 5 and a number.

9. When twice a number is subtracted from 10, the result is 4 more than the same number. Find the number.