

Unit one test review

Solve for x.

1)  $7x = 2x + 5$

2)  $21 - 3x = 4x$

3)  $9x = 26 - 4x$

4)  $16 - 3y = y$

5)  $13x - 7 = 5x + 1$

6)  $18 + 3x = x + 30$

Parenttheses

Solve for x

1)  $3(2x - 1) = 9$

2)  $8(y - 4) = 0$

3)  $5(x - 1) = 7 + x$

4)  $4(m + 3) = 6m + 8$

5)  $7(2a - 4) = 2(a + 4)$

6)  $7(x + 1) = 9 + 5x$

## Add polynomials

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each expression.**

1)  $(5x^3 + 4x^2) + (5x^3 - 5x^2)$

2)  $(3x^4 - 1) + (2x^4 + 3)$

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

4)  $(4b^4 - 3b) + (4b + 2b^4)$

5)  $(v^4 - 1) + (3 + 5v^4)$

6)  $(v^2 + 5) + (1 - 4v^2)$

Subtract the polynomials

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

2)  $(2x^2 + 2x) - (x^2 - 3x)$

3)  $(y + 6) - (-3y - 8)$

4)  $(x^2 + 3x + 2) - (x^2 - 4x + 1)$

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

6)  $(a^2 + 5ab - 2c) - (3a^2 + ab - c)$

Multiply the monomials. (add exponents)

1)  $(y^2)(y^3)$

2)  $(2x)(2x^2)$

3)  $(-2x^2)(x^5)$

4)  $(c^2)(-5c^3)$

5)  $(-6a^2)(4ab^5)$

6)  $(2x^2)(4x^2y)$

Powers of Monomials (multiply the exponents)

1)  $(c^2)^5$

2)  $(ab)^4$

3)  $(5a)^2$

4)  $(x^2)^3$

5)  $(2a)^2$

6)  $(4n^2)^2$

7)  $(-2a^5)^2$

8)  $(2a^2b)^2$