

Name: \_\_\_\_\_

## Algebra 2

### 5.1 Operations with Polynomials (Day 2)

Notes:

Example 3: Simplify each expression. Assume that no variable equals 0.

$$\left(\frac{-2a^4}{b^2}\right)^3$$

Example 4: Simplify each expression.

a.  $(4x^2 - 5x + 6) - (2x^2 + 3x - 1)$

b.  $(6x^2 - 7x + 8) + (-4x^2 + 9x - 5)$

Name: \_\_\_\_\_

Homework: Simplify.

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

7.  $(6a^2 + 5a + 10) - (4a^2 + 6a + 12)$

2.  $(3a + 4b) + (6a - 6b)$

8.  $(7b^2 + 6b - 7) - (4b^2 - 2)$

3.  $2a(4b + 5)$

9.  $3p(np - z)$

4.  $3x^2(2xy - 3xy^2 + 4x^2y^3)$

10.  $(x - y)(x^2 + 2xy + y^2)$

5.  $(n - 9)(n + 7)$

11.  $(a + b)(a^3 - 3ab - b^2)$

6.  $(a + 4)(a - 6)$

12.  $4(a^2 + 5a - 6) - 2(2a^3 + 4a - 5)$