Math 2A Name_____ ID: 1

2.3 Subtracting Polynomials

Date_____ Period____

Simplify each difference.

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

2) $(7n + 3n^2) - (8n^2 - 6n)$

3) $(7m - 4) - (3 - 6m)$

4) $(m^3 - 6m^4) - (2m^3 - 7m^4)$

5) $(2x^4 + 7x^3) - (3x^3 + 7x - 3x^4)$

6) $(3a^3 + 7a) - (6 - 5a^3 + 8a)$

7) $(8m^2 + m^4 + 3) - (3m^3 - 8m^2 - 1)$

8) $(2 - 6r^4 + 5r^2) - (7 - r^2 + 5r^4)$

Simplify each expression.

9) $(x^2 + 6x^4) - (-x^2 - 7 - 7x^4)$

10) $(-6b^3 - 7b^2) + (-b^3 + 8b + 3b^2)$

11) $(-3 + 4n^3) + (n + 4n^3 + 1)$

12) $(8p^4 + 7) - (7 + 2p^4 + 8p^3)$

13) $(1 - 8k^2 - 6k) - (7k - 1 - 5k^2)$

14) $(1 + v^2 - v^3) + (4v^3 - 6 - 7v^2)$

15) A bicycle company produces y bicycles at a cost represented by the polynomial $y^2 + 10y + 100000$. The revenue for y bicycles is represented by $2y^2 + 10y + 500$ Find a polynomial that represents the company's profit. If the company only has enough materials to make 300 bicycles, should it make the bicycles?

16) Hallie subtracted a quantity from the polynomial $3y^2 + 8y - 16$ and produced the expression $y^2 - 4$. What quantity did Hallie subtract? Explain how you got your answer.