Algebra 1　　　　　　　　　　　　　　　　　Name_____

Polynomial Operations- Add, Subtract, Classify　　　Date_____ Period____

For each problem, a) Write in Standard Form, b) Classify it by the number of terms, c) State the leading Coefficient d) State the Degree

1) $6v - 4 - 9v^3$

2) $2 - 5n$

3) $5x^3$

4) $5 + 8b^2 - 10b^4$

5) $-4x^2 + 2x - 10 - x^3$

6) -6

7) $8n + 6n^4$

8) $-7b^3 - 5b^4$

Simplify each expression.

9) $\left(2x^3 - 6 + 6x^2\right) + \left(5x^3 + 3x^2 + 6\right)$

10) $\left(2x - 8x^3 + 7\right) + \left(4 + 3x^3 + 5x\right)$

11) $\left(7b^2 - 5b - b^3\right) + \left(4b^2 - 8b + 3b^3\right)$

12) $\left(5b^2 - 3 + 2b\right) - \left(b - 6b^2 - 6\right)$

13) $\left(2x + x^3\right) - \left(5x^4 - 3x - 2x^3\right)$

14) $\left(6x^2 + 7x^3\right) - \left(x^3 - 4x^2 - 2\right)$

15) $\left(-4x^3 - 2 + 7x\right) + \left(-6 + 5x^2 + x^3\right)$

16) $\left(-4p + 3 + p^4\right) - \left(6 + 4p^4 - 5p^3\right)$

17) $\left(-7x + 6 - 7x^3\right) - \left(-4 - 5x^4 - 3x - 7x^3\right)$

18) $\left(-6m^3 + 3m^2 - 2m^4\right) + \left(-6 + 7m^2 + 2m^4 + m^3\right)$