

## 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)  $(2x^3 - 6 + 6x^2) + (5x^3 + 3x^2 + 6)$

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

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

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

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

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

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

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

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

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