

YOU MUST SHOW ALL YOUR WORK ON A SEPARATE SHEET! NO WORK = NO CREDIT

I. Write each polynomial in Standard Form and Classify it based on its degree and # of terms.

1.) $9v^2 + 7v - 8v^3 - 2$	2.) $-4m^2 + 8m^5 + 7m^4$	3.) -10
4.) $-2 + 9x^2$	5.) $7y - 8y^4 - 2$	6.) $7a - 2 + 6a$

II. Add or Subtract each expression. Answer should be in Standard Form.

7.) $(3v + 7v^2 + 7v^4) - (3v - 7v^4 + 2v^2)$ $14v^4 + 5v^2$	8.) $(8 - 8y^3 - 4y) + (7y^2 + 4y^3 + 5y)$ $-4y^3 + 7y^2 + y + 8$
9.) $(6x^4 - 6x - 7x^3) + (3x^3 - 3x^2) - (5 - 5x)$ $6x^4 - 4x^3 - 3x^2 - x - 5$	10.) $(2p^4 + 7p^3 - 4 + 8p) - (3p^4 - 5p) - (6p - 2p^3)$ $-p^4 + 9p^3 + 7p - 4$

III. Multiply each expression. Answer should be in Standard Form.

11.) $5a^2(-2a + 7a^2 - 4)$ _____	12.) $2xy^2(8x^2 + 8xy - y^2)$
13.) $(13p - 4)(7p + 12)$ $91p^2 + 128p - 48$	14.) $(8x - 5)^2$ $64x^2 - 80x + 25$
13.) $(10x - 4)(10x + 4)$ $100x^2 - 16$	14.) $(6p - 5)(6p^2 - 2p - 3)$ $36p^3 - 42p^2 - 8p + 15$

III. Simplify each expression. Answer should be in Standard Form.

15.) $(x + 5)(4x - 1) + 6x(4x^2 - 5x + 1)$ $24x^3 - 26x^2 + 26x - 5$	16.) $(3x - 4)^2 - 2x(3x + 7 - 5x + 2)$ $13x^2 - 42x + 16$
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