Math 002 P1   **Name:**

Quiz # 3

September 16, 2014 No electronic devices or interpersonal communication allowed. Show work to get credit.

(1) Identify each of the following expressions as a polynomial or not. For the polynomials, write their degree and the number of terms.

    (a) $3x + 8x^3$

    (b) $x + \dfrac{4}{x}$

    (c) $9x^5 + \sqrt{x}$

    (d) 4

    (e) $9 - x + 3x^2 - 2x^5$

(2) Simplify $(3x^4 + x^3 + 1) - (x^4 + x^2 - x + 3)$.

(3) Expand $(x^2 + 4)(x - 3)$.

(4) Compute $(x^3 + 3x^2 - x + 1) \div (x + 1)$.