

Write the polynomial in standard form. Give the degree, the leading coefficient and the number of terms for each.

$$-3p^4 - 5 - 9p^3 + 8p^5$$

$$-9m^6 - 5m^3 - 5m^4$$

Describe the end behaviors without graphing.

$$f(x) = -x^5 + 4x^3 - 4x + 2$$

$$f(x) = -2x^2 + 16x - 26$$

$$f(x) = x^2 - 4x + 4$$

$$f(x) = x^5 - 3x^3 + 1$$

Graph each polynomial. Identify all intervals on which the equation is increasing or decreasing. Give the end behaviors

$$y = -x^3 + 2x^2 + 2$$

$$y = -x^4 + 3x^2 - 3$$