

Spiral Polynomial Review

Date _____ Period _____

Simplify each expression and write in Standard Form.

1) $8v^4 + 5 - 7v^3 - 5v^2 + v^4 + 7$

2) $(k^3 - 6) - (6k^3 - 4k^4 + 6)$

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

Evaluate each function at the given value.

4) $f(x) = -3x^3 - 9x^2 + 6x + 15$ at $x = -3$

5) $f(n) = n^3 - 7n^2 + 15n - 14$ at $n = 4$

Write a polynomial function in Standard Form that has the given zeros.

6) $\frac{1}{4}, -3, 1$

Sketch the graph of each function. Find the x-intercept/s, minimum/s, maximum/s, and EB for the graph.

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

