

5B-5 End Behavior/Writing Functions E-Learning

Date _____ Period _____

Describe the end behavior of each function.

1) $f(x) = -x^3 + 3x^2 - 6$

2) $f(x) = x^3 - x^2 + 1$

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

4) $f(x) = -x^4 + 3x^2 - 1$

Write a polynomial function of least degree with integral coefficients that has the given zeros.

5) 5, -4, 3

6) 1, 0, 4

7) -2, 3, 1

8) -1, -2, -4, 4

Find all zeros.

9) $f(x) = (5x + 3)(x^2 + 2)$

10) $f(x) = x^3 + 4x^2 - 4x - 16$