

5-7 End Behavior & Writing Polynomial Functions

Date _____ Period _____

Describe the end behavior of each function.

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

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

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

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

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

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

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

7) $-5, -3, 5$

8) $0, 1, 5$

9) $-5, 2, 1$

10) $-5, -3, 4$