

SECTION 4.1: GRAPHING POLYNOMIAL FUNCTIONS

Homework: _____

Learning Targets:

- 4e. Understanding of polynomial functions, including end behavior, degree, local maximum and minimum, multiplicity, determining if a function is odd or even, and graphing polynomial functions.

Polynomial Function: a function that is a monomial or _____ of monomials

$$f(x) = a_n x^n + a_{n-1} x^{n-1} + a_{n-2} x^{n-2} \dots$$

Degree: the value of the largest _____

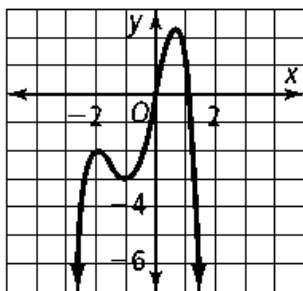
Degree	0	1	2	3	4
Name	Constant	Linear	Quadratic	Cubic	Quartic
Standard Form					
Graph					

End Behavior: explains a graphs behavior at the beginning and end

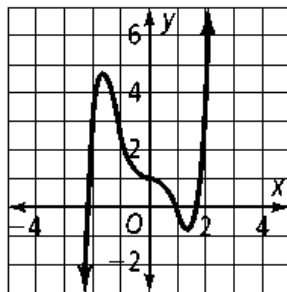
$$f(x) \rightarrow \text{_____ as } x \rightarrow +\infty$$

$$f(x) \rightarrow \text{_____ as } x \rightarrow -\infty$$

1.



2.



3.

