

Polynomial Functions:

Standard Form: Degrees go from Largest^{to} Smallest.

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

↑
↑
↑
↑

Cubic Term
Quadratic Term
Linear Term
Constant Term

Number of Terms.

$$4x^3 - 2 \leftarrow \text{Cubic Polynomial}$$

$$\leftarrow 2 \text{ Terms}$$

Monomial - 1 Term

Binomial - 2 Terms

Trinomial - 3 Terms

Polynomial of n Terms - n Terms


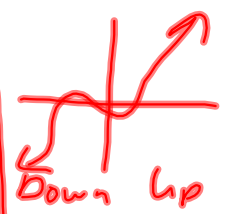
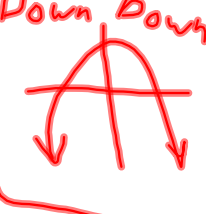
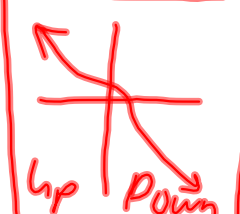
$$P(x) = -3x^3 + 2x^2 + 7x - 3$$

← Degree

+/-

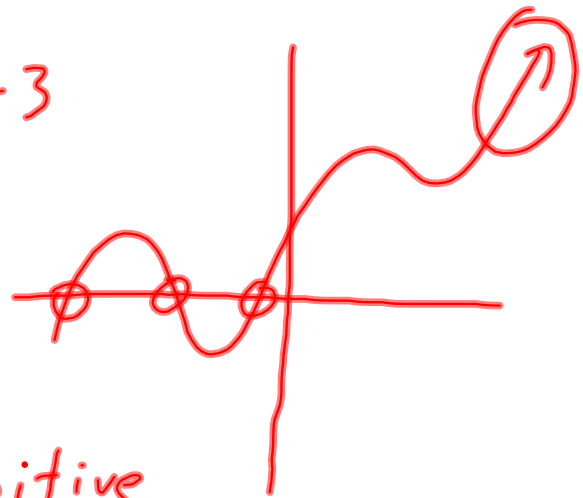
End Behavior

Even Degree Odd Degree

 UP ↑ UP	 Down Up
 Down Down	 Up Down

Positive
Coefficient

Negative
Coefficient



Ex 1) $-3x^2 + 2x + 4$

2) $5x^5 + 3x^3 + 7$

3) $-2x^3 + 2x^2 + 7x - 3$