Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**End Behavior:**

Look \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_, to figure out what’s happening \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_.



**Graphically:**

 







**Algebraically:**

1. 



1. 



1. 



**Extrema:** are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the graph.

* If you are given a \_\_\_\_\_\_\_\_\_\_\_\_\_\_, take the turns and \_\_\_\_\_\_\_\_\_\_ 1 to get the least possible degree of the polynomial.



Least Possible Degree:

* If you are given the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, take the degree and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 to get the number of extrema.

f(x) = 2x3 – 3x2 + 5

Number of Extrema:

**Graphically, what is the least possible degree?**





**Algebraically, what is the number of extrema?**

1. 
2. 
3. 

**Sketching:** Given the polynomial and zeros, sketch a graph and determine the characteristics

1. 

# of Zeros: \_\_\_\_\_\_\_\_\_\_ Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_



1. 

# of Zeros: \_\_\_\_\_\_\_\_\_\_ Y-Int: \_\_\_\_\_\_\_\_\_\_\_\_\_

