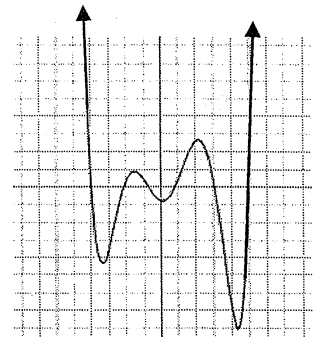


**Investigating the Turning Points of the Graphs of Polynomial Functions**

**Recall:** A turning point is a point where the graph changes from increasing to decreasing or decreasing to increasing. *Turning points result in local minimum or local maximum values.*

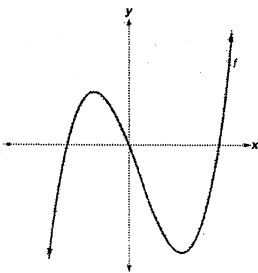
Maximum and Minimum Values	
Global	Local
The function never takes on a value that is greater than the maximum or less than the minimum	A maximum or minimum within some interval around the <b>turning point</b> that does not need to be ( <i>but may be</i> ) a global maximum or global minimum

**Example)** Given the graph, determine the number of turning points, the number of global maximum and/or minimum values, and the number of local maximum and/or minimum values that are not global.



**For each graph, tell the number of turning points and the number of Global max/min and/or local max/min values that are not global.**

A.



Turning Points: \_\_\_\_\_

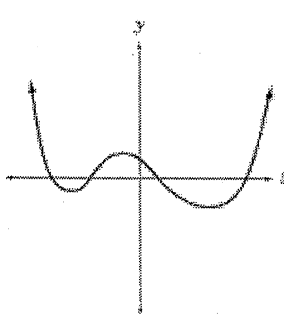
Global Max: \_\_\_\_\_

Local Max: \_\_\_\_\_

Global Min: \_\_\_\_\_

Local Min: \_\_\_\_\_

B.



Turning Points: \_\_\_\_\_

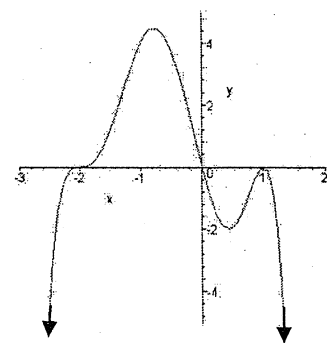
Global Max: \_\_\_\_\_

Local Max: \_\_\_\_\_

Global Min: \_\_\_\_\_

Local Min: \_\_\_\_\_

C.



Turning Points: \_\_\_\_\_

Global Max: \_\_\_\_\_

Local Max: \_\_\_\_\_

Global Min: \_\_\_\_\_

Local Min: \_\_\_\_\_