MTH 30 LECTURE NOTES (Ojakian)
Topic 3: Graph Behavior

OUTLINE
(References: 1.3)

1. Increasing and Descreasing

2. Max and Min

3. Note: Skipping average value

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1. <u>Some funny words</u>

   (a) "input" = "at" = "where" = "when"
   (b) "output" = "value"
   (c) Problem: Draw a graph and use this terminology

2. <u>Going up and going down</u>

   (a) increasing
   (b) decreasing
   (c) Do 1.3: 19, 21

3. <u>Absolute Extrema</u>

   (a) Absolute max
   (b) Absolute min
   (c) Do: Basic example
   (d) Problem: Consider graphs in 1.3 - 19, 21
   (e) Problem:
       Find a graph with 1) no absolute extrema, 2) just an absolute max, 3) just an absolute min

4. <u>Local Extrema</u>

   (a) Local max
   (b) Local min
   (c) Do: Local extrema for 1.3: 19
   (d) Probelm: Find a graph with no local extrema