Groupwork 23

Abbreviations:
loc. (local),
abs. (absolute),
end (endpoint),
crit. (critical point).

Example
List critical points and their values left-to-right:
\[ x = -1, 2, 3 \]
Classify extremes and their values (left-to-right):
\[ f(-1) = 2 \text{ loc. min.} \]
\[ f(2) = 4 \text{ loc. and abs. max} \]
\[ f(3) = -1 \text{ end. and abs. min} \]
List intervals of increase and decrease in increasing order:
\[ \cap (-\infty, -1) \cup [-1, 2) \cup [2, 3) \] Include endpoints where the function is defined.

195:
2(2) Classify the extreme values and list the intervals of increase and decrease.

List the three critical points left-to-right (as in the example).
Classify the extremes and their values (as in the example).
List intervals of increase and decrease in increasing order (as in the example).

10(3) Classify the extreme values and list the intervals of increase and decrease.
List the three critical points left-to-right (as in the example).
Classify the extremes and their values (as in the example).
List the two intervals of increase and decrease in increasing order, i.e., from left to right (as in the example).

Work on Groupwork 24 ahead of time.