

Handout Chapter 8

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Condition for Maximum and Minimum:

First-Order condition: $f_1 = f_2 = 0$

Second-Order condition:

(1) $f_{11} < 0$ and $|H| > 0 \rightarrow y$ is maximum

(2) $f_{11} > 0$ and $|H| > 0 \rightarrow y$ is minimum