## Unit 7: Optimization

## Vocabulary and notation

| maximum | minimum | maximum over an interval | minimum over an interval |
| :--- | :--- | :--- | :--- |
| local maximum | local minimum | global maximum | global minimum |
| extremum | critical point | objective function |  |

plurals of the terms "maximum", "minimum" and "extremum"

## Skills

- Procedure for finding extrema of piecewise differentiable functions
- Know under what conditions a maximum must exist
- Second derivative test for a maximum versus a minimum
- Parametrizing to set up a max/min problem

