Maximums and minimums

After completing this section, students should be able to do the following.

- Define absolute/global maximum and absolute/global minimum.

- Define relative/local maximum and relative/local minimum.

- Compare and contrast local/relative and absolute/global maxima and minima.

- Define a critical point.

- Find critical points.

- Find the absolute max or min of a continuous function on a closed interval.

- Identify situations in which an absolute maximum or minimum is guaranteed.

- Classify critical points.

- State the First Derivative Test.

- Apply the First Derivative Test.

- State the Second Derivative Test.

- Apply the Second Derivative Test.

- Define inflection points.

- Find inflection points.

Learning outcomes: