

Main Ideas

Here are the main points that are addressed in the video. Please read these and think about them as you watch.

- In calculus, we often refer to the *instantaneous rate of change* of one quantity with respect to another. This is slightly misleading since a rate of change is a comparison between changes in quantities measures. Rates of change do not occur at an instant - *they require CHANGES in quantities measures to exist*.
- Because instantaneous rate of change cannot be measured directly, it must be approximated using average rates of change.
- We can often improve the accuracy of approximations of an instantaneous rate of change by decreasing the size of the interval over which we compute the average rate of change approximation.