

5.1 Introduction to differentiation

Checklist

What you should know

By the end of this subtopic you should be able to:

- understand the concept of the
 - limit of a sequence
 - limit of a function both at infinity and at a finite point
- estimate the value of a limit
 - using table of values
 - using graphs
- be aware that tangents to curves are limits of secant lines
- understand the concept of the gradient of a curve
- understand the concept of the derivative as the gradient function
- understand that a gradient expresses a rate of change
- understand the connection and difference between average rate of change and instantaneous rate of change.

