GRADIENT OF A FUNCTION IN CONTEXT:
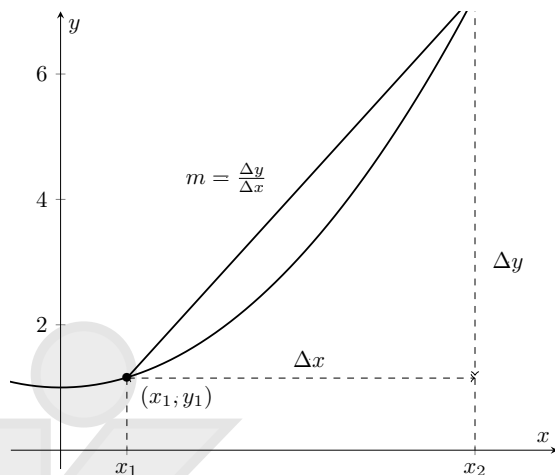
The **gradient at any point** of the graph represents the **rate of change at that moment in time**.

In some cases, a function may be used to represent information on a graph.

For example, by allowing the x-axis to represent time, we can graph the change of a multitude of variables by allowing the y-axis to represent a variety of things.

The most common example of this is a distance–time graph.

11.3 WORKED EXAMPLE

Below is the graph of a vehicle' s displacement from the origin over time. At what times does the vehicle change direction?