

5.6 Stationary points

Checklist

What you should know

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

- find the values of x where the gradient of a curve is zero
 - solving $f'(x) = 0$ algebraically when a polynomial equation is involved
 - using a calculator to graph the derivative (without algebraically finding it first) and use this graph to solve $f'(x) = 0$.
- identify stationary points on a curve
 - recognising whether a stationary point is a local maximum, a local minimum or a horizontal point of inflection
- find global maximum and minimum values
 - being aware that on a restricted domain the global maximum and minimum values may not correspond to a stationary point.

