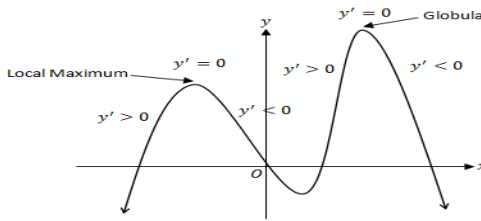


Goals

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

- Use derivatives to solve practical problems
- Identify turning points and points of inflection
- Find the second derivative

SAME AS LAST WEEK



Theoretical Components

STEP 1

Resources:

Maths Quest Year 12 Chapter 7 (printed copy),
and Chapter 8 (pdf on Google Drive)

Identifying Turning Points and Points of Inflection

Lesson

<https://mathspace.co/teach2/chapter/38962/1969/>

Second Derivative

Lesson

<https://mathspace.co/teach2/chapter/38966/1974/>

Second – Derivative Test

Let $f'(c) = 0$ and let f'' exist on an open interval containing c .

1. If $f''(c) > 0$, then $f(c)$ is a relative minimum.
2. If $f''(c) < 0$, then $f(c)$ is a relative maximum.
3. If $f''(c) = 0$ then the test fails. Use the First Derivative Test.

Practical Components

STEP 2

Do the mathspace.co custom task **Optimisation using Calculus**

GET UP-TO-DATE WITH PREVIOUS BRIEFS AND WORK ON YOUR ASSIGNMENT

Investigation/Journal

STEP 3

No new investigation for this week.
Work on your assignment.

QFO

Quiz/Forum/Other

Remember to scan in when you come to the Maths Area and when you leave.