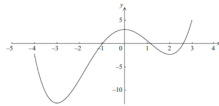


IB Calculus Problem 10

A function f is defined for $-4 \leq x \leq 3$.

The graph of f is shown below.

The figure is not to scale.



The graph has a local maximum at $x = 0$ and local minima at $x = -3$ and $x = 2$.

- Write down the x -intercepts of the graph of the derivative function, f' .
- Write down all values of x for which $f'(x)$ is positive.
- At point D on the graph of f , the x -coordinate is -0.5 .

Explain why $f''(x) < 0$ at D .