

9 A continuous curve has equation $y = f(x)$

The curve passes through the points $A(2, 1)$, $B(4, 5)$ and $C(6, 1)$

It is given that $f'(4) = 0$

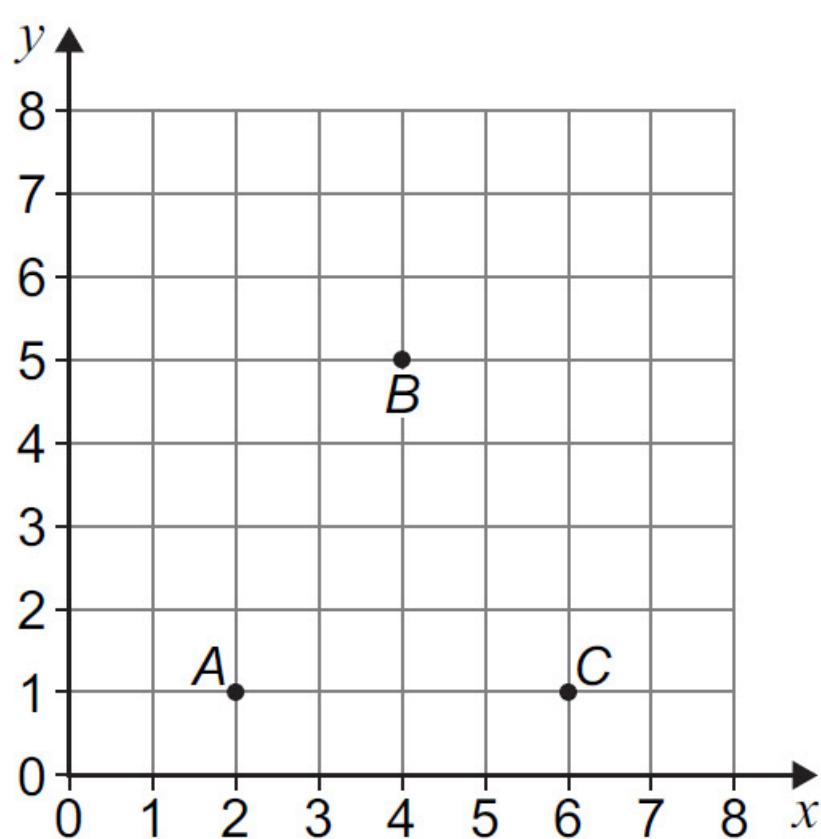
Jasmin made two statements about the nature of the curve $y = f(x)$ at the point B :

Statement 1: There is a turning point at B

Statement 2: There is a maximum point at B

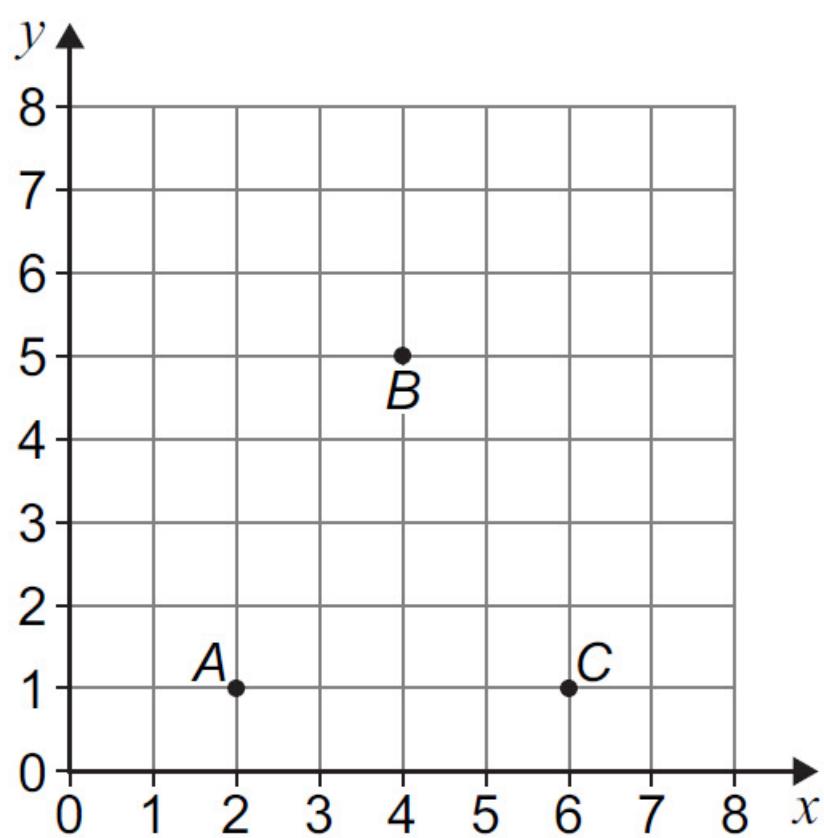
9 (a) Draw a sketch of the curve $y = f(x)$ such that Statement 1 is correct and Statement 2 is correct.

[1 mark]



9 (b) Draw a sketch of the curve $y = f(x)$ such that Statement 1 is correct and Statement 2 is **not** correct.

[1 mark]



9 (c) Draw a sketch of the curve $y = f(x)$ such that Statement 1 is **not** correct and Statement 2 is **not** correct.

[1 mark]

