19 The curve shown in the diagram has equation

$$y = x^3 - 27x + k \text{ where } k \text{ is a positive constant with } k < 54$$

The curve has a maximum point at $A\ (a, b)$
The curve has a minimum point at $B\ (c, d)$

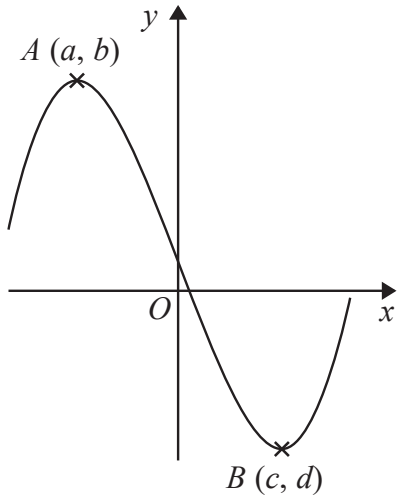


Diagram **NOT** accurately drawn

Using differentiation, find the value of $b - d$
Show your working clearly.

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(Total for Question 19 is 6 marks)

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