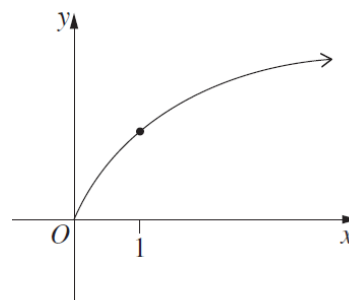




20 8 The graph of $y = f(x)$ is shown.
MA

Which of the following inequalities is correct?

- A. $f''(1) < 0 < f'(1) < f(1)$
- B. $f''(1) < 0 < f(1) < f'(1)$
- C. $0 < f''(1) < f'(1) < f(1)$
- D. $0 < f''(1) < f(1) < f'(1)$

**1****A**

At $x = 1$, the graph positive ($f(1) > 0$), increasing ($f'(1) > 0$) and concave down ($f''(1) < 0$).

The slope of the curve at $x = 1$ appears to be approximately 45° , which means $f'(1) = 1$.

At $x = 1$, the value of $f(1)$ appears to be greater than 1.

This means $f''(1) < 0 < f'(1) < f(1)$.

State Mean:
0.52/1

* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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