

Answer on Question #55713 - Math - Calculus

6. A function $y = f(x)$ is said to be differentiable at point $x = a$ if
- A. it possesses a differential coefficient and differentiable at a point $x = a$
 - B. it does not possess a differential coefficient but differentiable at a point $x = a$.
 - C. it possesses a differential coefficient and not differentiable at a point $x = a$.
 - D. it possesses a differential coefficient and differentiable at any point x

Solution

A function $y = f(x)$ is said to be differentiable at point $x = a$ if it possesses a differential coefficient and differentiable at a point $x = a$.

If f is differentiable at a point $x=a$, then f also must be continuous at $x=a$.

Function f is said to be differentiable at $x=a$ if the derivative $f'(a)$ exists.

The differential coefficient of a function $f(x)$ is what is now called its derivative $df(x)/dx$

Answer: A.