

MTH101 2nd Quiz

Date : 1 December 2014

Question # (01) $x^2 - 9 = \dots\dots\dots$

$|(x-3)^2|$

$|(x+3)^2|$

$|x-3||x+3|$

$|x+3||x+3|$

Question # (02) Usually the number that signifies the idea of $f(x)$ being as close to limit L as want to be must be a/an

Integer

Natural number

Small positive number.

Small negative number.

Question # (03) A function f is said to be continuous on a closed interval $[a, b]$ if f is continuous from the right at " a " and " f " is continuous from the left at " b " and " f " is continuous on

$(a, b]$

$[a, b)$

$[a, b]$

(a, b)

Question # (04) If f is continuous on $[a, b]$, and if $f(a)$ and $f(b)$ have opposite signs, then there is one solution of the equation $f(x) = 0$ in the interval (a, b) .

at most

exactly

at least

not more than

Question # (05) ϵ (epsilon) used in the definition of limit can be a negative number.

True

False

Question # (06) If a function is differentiable at a point then it is continuous at that point. The converse is

False

True

Question # (07) If the function f and g are continuous at c , then $f + g$ is at c .

Discontinuous

Continuous

Question # (8)

If f is continuous on a closed interval $[a, b]$ and C is any number between $f(a)$ and $f(b)$, inclusive, then there is at least one number x in the interval $[a, b]$ such that -----

$f(x)$ is not equal to C

$f(x) = C$

$f(x) > C$

$f(x) < C$

Question # (9) $|x-3| < 1$ implies.....

$-4 < x < 4$

$2 < x < 4$

$-2 < x < -4$

$$x-3 < 1$$

Question # (10): If for any positive number ϵ (epsilon) we can find δ (delta) such that $| (3x-5) - 1 | < \epsilon$,if x satisfies $0 < |x-2| < \delta$ Then $f(x) = \dots\dots\dots$

$$3x-5- 1$$

$$x-2$$

$$3x-5$$

None of these