

MC170201745: Shakeel Ahmad

Time Left 73 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 07:47 PM, 16 January 2018

Question # 9 of 10 ( Start time: 07:54:42 PM, 16 January 2018 )

Total Marks: 1

The limit

$$\lim_{x \rightarrow 1} \sqrt{x} - 1.$$

Select the correct option

Reload Math Equations

- 1.
- 0.
- does not exist.
- 1.

Click to Save Answer & Move to Next Question

Time Left 31 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 8 of 10 ( Start time: 02:13:27 PM, 28 November 2017 )

Total Marks: 1

The set of terms of  $\{s_{n_k}\}$  is contained in the set of terms of  $\{s_n\}$  implies

Reload Math Equations

Select the correct option

- $\sup\{s_n\} = \sup\{s_{n_k}\}.$
- $\sup\{s_n\} \leq \sup\{s_{n_k}\}.$
- $\sup\{s_n\} \geq \sup\{s_{n_k}\}.$
- $\{s_n\}$  is convergent.

MC170202886: Aqsa Zunaira

MTH621:Quiz 4 -Lectures 30 to 37

Question # 2 of 10 ( Start time: 10:03:30 PM, 06 February 2018 )

Total Marks: 1

The Mean Value Theorem says. suppose that  $f$  is differentiable on  $[a, b]$ ,  $f'(a) \neq f'(b)$ , and  $\mu$  is between  $f'(a)$  and  $f'(b)$ .

Select the correct option

Reload Math Equations

Then  $f'(c) \neq \mu$  for some  $c$  in  $(a, b)$ .Then  $f'(c) = \mu$  for some  $c$  in  $(a, b)$ .Then  $f'(c) = 0$  for some  $c$  in  $(a, b)$ .Then  $f'(c)$  may be 0 or  $\mu$  for some  $c$  in  $(a, b)$ .

Click to Save Answer &amp; Move to Next Question

Time Left 74 sec(s)

MC170201745: Shakeel Ahmad

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 07:47 PM, 16 January 2018

Question # 1 of 10 ( Start time: 07:47:22 PM, 16 January 2018 )

Total Marks: 1

The limit

$$\lim_{x \rightarrow \infty} x^2 - x.$$

is

Select the correct option

Reload Math Equations

- |                                  |                 |
|----------------------------------|-----------------|
| <input checked="" type="radio"/> | does not exist. |
| <input type="radio"/>            | 2.              |
| <input type="radio"/>            | 0.              |
| <input type="radio"/>            | 6.              |

Click to Save Answer &amp; Move to Next Question

Time Left 35 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 1 of 10 ( Start time: 02:06:09 PM, 28 November 2017 )

Total Marks: 1

Which statement(s) is(are) true about the following sequence  $s_0 = 1$  and  $s_n = 1 - e^{-s_{n-1}}$

Select the correct option

Reload Math Equations

- $0 < s_n \leq 1$  for all  $n$ .
- $s_{n+1} - s_n = -(e^{-s_n} - e^{-s_{n-1}})$ .
- Sequence is convergent.
- All of the above.



MC170202886: Aqsa Zunaira

Time Left 55 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:03 PM, 06 February 2018

Question # 9 of 10 ( Start time: 10:05:45 PM, 06 February 2018 )

Total Marks: 1

If  $f : I \rightarrow \mathbb{R}$  has a derivative at  $c \in I$ , then  $f$  is

Select the correct option

Reload Math Equations

- continuous at c.
- discontinuous at c.
- undefined at c.
- having one sided limit.

Click to Save Answer & Move to Next Question

Time Left 30 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 7 of 10 ( Start time: 02:12:09 PM, 28 November 2017 )

Total Marks: 1

The series  $\sum_{n=0}^{\infty} r^n$ ,  $-1 < r < 1$ , is

Reload Math Equations

Select the correct option

- divergent.
- convergent and converges to  $\frac{1}{1+r^2}$ .
- convergent and converges to 5.
- convergent and converges to  $\frac{1}{1-r}$ .

Time Left 40 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621:Quiz 2

Question # 2 of 10 ( Start time: 02:07:17 PM, 28 November 2017 )

Total Marks: 1

If the sequence is increasing, then it

Select the correct option

- converges to its supremum.
- diverges.
- may converges to its supremum.
- is bounded.



Time Left 53 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 4 of 10 ( Start time: 02:09:40 PM, 28 November 2017 )

Total Marks: 1

Identify the identical sequences.

Select the correct option

Reload Math Equations

- $\left\{ \frac{1}{n^2-2} \right\}_3^\infty$  and  $\left\{ \frac{1}{n} \right\}_1^\infty$ .
- $\left\{ \frac{1}{n} \right\}_3^\infty$  and  $\left\{ \frac{1}{n} \right\}_1^\infty$ .
- $\left\{ \frac{1}{n-2} \right\}_3^\infty$  and  $\left\{ \frac{1}{n^2} \right\}_1^\infty$ .
- $\left\{ \frac{1}{n-2} \right\}_3^\infty$  and  $\left\{ \frac{1}{n} \right\}_1^\infty$ .

MC170201745: Shakeel Ahmad

Time Left 63 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 09:37 PM, 06 February 2018

Question # 10 of 10 ( Start time: 09:42:41 PM, 06 February 2018 )

Total Marks: 1

$\lim_{x \rightarrow 0^+} x \log x$ , has the following indeterminate form

Select the correct option

[Reload Math Equations](#) $\infty \times \infty$ . $(0)(\infty)$ . $\frac{0}{0}$ . $0^\infty$ .[Click to Save Answer & Move to Next Question](#)

MC170202886: Aqsa Zunaira

MTH621:Quiz 4 -Lectures 30 to 37

Question # 4 of 10 ( Start time: 10:04:12 PM, 06 February 2018 )

Total Marks: 1

Rolle's Theorem says. suppose that  $f$  is continuous on the closed interval  $[a, b]$  and differentiable on the open interval  $(a, b)$  and  $f(a) = f(b)$ .

Select the correct option

Reload Math Equations

Then  $f'(c) = 0$  for some  $c$  in the open interval  $(a, b)$ .Then  $f'(c) \neq 0$  for some  $c$  in the open interval  $(a, b)$ .Then  $f'(c)$  exists for some  $c$  in the open interval  $(a, b)$ .Then  $f'(c) = 0$  for some  $c$  in the open interval  $(a, \infty)$ .

Click to Save Answer &amp; Move to Next Question

MC170202886: Aqsa Zunaira

MTH621:Quiz 4 -Lectures 30 to 37

Question # 5 of 10 ( Start time: 10:04:36 PM, 06 February 2018 )

Total Marks: 1

Generalized Mean Value Theorem says. If  $f$  and  $g$  are continuous on the closed interval  $[a, b]$  and differentiable on the open interval  $(a, b)$ , then

Select the correct option

Reload Math Equations

for some  $c$  in  $(a, b)$ .

$$[g(b) - g(a)]f'(c) = [f(b) - f(a)]g'(c)$$

for some  $c$  in  $(a, b)$ .

$$[g(b) - g(a)] = [f(b) - f(a)]g'(c)$$

 $g'(x) = 0$  for all  $x$  in  $(a, b)$ . $g'(x) = f'(x)$  for all  $x$  in  $(a, b)$ .

Click to Save Answer &amp; Move to Next Question



Time Left 77 sec(s)

Quiz Start Time: 09:46 PM, 18 January 2018

MC170202886: Aqsa Zunaira

MTH621:Quiz 3 - Lecture 23 to 27

Question # 5 of 10 ( Start time: 09:47:26 PM, 18 January 2018 )

Total Marks: 1

For the function defined as  $f(x) = cx$ , for every  $\epsilon > 0$  the formal definition of limit of function ensures

Select the correct option

Reload Math Equations

- $|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } 0 < \delta < \epsilon.$
- $|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } 0 < \delta < \epsilon/|c|.$
- $|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } -\epsilon < \delta < \epsilon.$
- $|f(x) - c| < \epsilon, \quad |x - x_0| < \delta, \text{ where } 0 < \delta < \epsilon.$

Click to Save Answer &amp; Move to Next Question



MC170200890: Awwal Khan

Time Left 82 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:31 PM, 06 February 2018

Question # 2 of 10 ( Start time: 10:32:00 PM, 06 February 2018 )

Total Marks: 1

If  $f : I \rightarrow \mathbb{R}$  has a derivative at  $c \in I$ , then  $f$  is

Select the correct option

Reload Math Equations

- continuous at c.
- discontinuous at c.
- undefined at c.
- having one sided limit.

Click to Save Answer & Move to Next Question

MC170201745: Shakeel Ahmad

Time Left 27 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 07:47 PM, 16 January 2018

Question # 6 of 10 ( Start time: 07:51:32 PM, 16 January 2018 )

Total Marks: 1

The  $\lim_{x \rightarrow 0} \frac{4-4\cos x - 2\sin^2 x}{x^4}$  is

Select the correct option

Reload Math Equations

- $\frac{1}{4}$
- $-\frac{1}{2}$
- $\frac{1}{2}$
- 2

Click to Save Answer & Move to Next Question

MC170202886: Aqsa Zunaira

Time Left 70 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:03 PM, 06 February 2018

Question # 10 of 10 ( Start time: 10:06:24 PM, 06 February 2018 )

Total Marks: 1

The function  $h(x) = -x^3$  is

Select the correct option

Reload Math Equations

- is undefined on  $(-\infty, \infty)$ .
- decreasing on  $(-\infty, \infty)$ .
- increasing on  $(-\infty, \infty)$ .
- positive on  $(-\infty, \infty)$ .

Click to Save Answer & Move to Next Question

MC170201745: Shakeel Ahmad

Time Left 51  
sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 09:37 PM, 06 February 2018

Question # 8 of 10 ( Start time: 09:41:16 PM, 06 February 2018 )

Total Marks: 1

The inverse of the given function  $f(x) = 2x + 4, 0 \leq x \leq 2$  is

Select the correct option



$$f^{-1}(y) = \frac{(y - 4)}{2}$$



$$f^{-1}(y) = \frac{(y - 2)}{4}$$



$$f^{-1}(y) = \frac{(x - 2)}{4}$$



$$f^{-1}(y) = \frac{(y - 4)}{4}$$

Click to Save Answer &amp; Move to Next Question

MC170201745: Shakeel Ahmad

MTH621:Quiz 4 -Lectures 30 to 37

Question # 7 of 10 ( Start time: 09:40:26 PM, 06 February 2018 )

Total Marks: 1

The inverse of the function  $f(x) = x^2$ , is

Select the correct option

Reload Math Equations



$$f^{-1}(y) = y^2$$



$$f^{-1}(y) = \sqrt{y}.$$



$$f^{-1}(y) = \frac{1}{x^2}$$



$$f^{-1}(y) = \frac{1}{y^2}$$

Click to Save Answer &amp; Move to Next Question



Time Left 54 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 5 of 10 ( Start time: 02:10:35 PM, 28 November 2017 )

Total Marks: 1

Which statement(s) is(are) true about the following sequence  $s_0 = 1$  and  $s_n = 1 - e^{-s_{n-1}}$

Reload Math Equations

Select the correct option

- $0 < s_n \leq 1$  for all  $n$ .
- $s_{n+1} - s_n = -(e^{-s_n} - e^{-s_{n-1}})$ .
- Sequence is convergent.
- All of the above.

MC170202886: Aqsa Zunaira

MTH621:Quiz 4 -Lectures 30 to 37

Question # 3 of 10 ( Start time: 10:04:02 PM, 06 February 2018 )

Total Marks: 1

The inverse of the function  $f(x) = x^2$ , is

Select the correct option

Reload Math Equations



$$f^{-1}(y) = y^2$$



$$f^{-1}(y) = \sqrt{y}$$



$$f^{-1}(y) = \frac{1}{x^2}$$



$$f^{-1}(y) = \frac{1}{y^2}$$

Click to Save Answer &amp; Move to Next Question

MC170201745: Shakeel Ahmad

Time Left 55 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 07:47 PM, 16 January 2018

Question # 6 of 10 ( Start time: 07:51:32 PM, 16 January 2018 )

Total Marks: 1

The  $\lim_{x \rightarrow 0} \frac{4-4\cos x - 2\sin^2 x}{x^4}$  is

Select the correct option

Reload Math Equations

 $\frac{1}{4}$  $-\frac{1}{2}$  $\frac{1}{2}$ 

2

Click to Save Answer &amp; Move to Next Question

Time Left 47 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 3 of 10 ( Start time: 02:08:24 PM, 28 November 2017 )

Total Marks: 1

Which of the following given sets is compact subset of  $\mathbb{R}$ .

Select the correct option

Reload Math Equations

- (1.5)
- {1.2.4}
- [0.1]
- (2.3)

MC170201745: Shakeel Ahmad

MTH621:Quiz 3 - Lecture 23 to 27

Question # 3 of 10 ( Start time: 07:48:48 PM, 16 January 2018 )

Total Marks: 1

For the function  $\frac{|x|}{x}$ , identify the false statement(s)

Select the correct option

Reload Math Equations



$$\lim_{x \rightarrow 0^+} \frac{|x|}{x} = 1$$



$$\lim_{x \rightarrow 0^-} \frac{|x|}{x} = -1.$$



$$\lim_{x \rightarrow 0} \frac{|x|}{x} \text{ doesn't exist.}$$



$$\lim_{x \rightarrow 0} \frac{|x|}{x} = 1.$$



Click to Save Answer &amp; Move to Next Question



MC170202886: Aqsa Zunaira

Time Left 81 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 09:46 PM, 18 January 2018

Question # 7 of 10 ( Start time: 09:48:03 PM, 18 January 2018 )

Total Marks: 1

The value of the limit

$$\lim_{x \rightarrow 0^+} x \log x,$$

Select the correct option

Reload Math Equations

- 0
- 1
- 2
- 3

Click to Save Answer & Move to Next Question

Question # 9 of 10 ( Start time: 09:48:57 PM, 18 January 2018 )

Total Marks: 1

For the function  $f(x) = x \sin \frac{1}{x}$ ,  $x \neq 0$ , which statement is true

Select the correct option

Reload Math Equations



$$\lim_{x \rightarrow 1/\pi} f(x) = 0.$$



The function is not defined at

$$x = 0.$$



$$\lim_{x \rightarrow 0} f(x) = 1.$$



$$\lim_{x \rightarrow 0} f(x) = 0.$$

Click to Save Answer &amp; Move to Next Question

MC170201745: Shakeel Ahmad

MTH621:Quiz 3 - Lecture 23 to 27

Question # 4 of 10 ( Start time: 07:49:47 PM, 16 January 2018 )

Total Marks: 1

For the function

$$f(x) = x \sin \frac{1}{x}, \quad x \neq 0,$$

Select the correct option

Reload Math Equations



$$\lim_{x \rightarrow 1/x} f(x) = 0.$$

The function is not defined at  $x = 0$ .

$$\lim_{x \rightarrow 0} f(x) = 1.$$



$$\lim_{x \rightarrow 0} f(x) = 0.$$

Click to Save Answer &amp; Move to Next Question

MC170202886: Aqsa Zunaira

Time Left 62 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 09:46 PM, 18 January 2018

Question # 8 of 10 ( Start time: 09:48:22 PM, 18 January 2018 )

Total Marks: 1

For the piecewise defined function  $f(x) = \begin{cases} x^3, & x \leq 0, \\ x^2 \sin \frac{1}{x}, & x > 0, \end{cases}$

$$f(x) = \begin{cases} x^3, & x \leq 0, \\ x^2 \sin \frac{1}{x}, & x > 0, \end{cases}$$

Select the correct option

Reload Math Equations

- 0
- 2
- 1
- 1

Click to Save Answer & Move to Next Question

MC170200890: Awwal Khan

MTH621:Quiz 4 -Lectures 30 to 37

Question # 7 of 10 ( Start time: 10:33:35 PM, 06 February 2018 )

Total Marks: 1

The inverse of the given function  $f(x) = 2x + 4, 0 \leq x \leq 2$  is

Select the correct option



$$f^{-1}(y) = \frac{(y - 4)}{2}$$



$$f^{-1}(y) = \frac{(y - 2)}{4}$$



$$f^{-1}(y) = \frac{(x - 2)}{4}$$



$$f^{-1}(y) = \frac{(y - 4)}{4}$$

Click to Save Answer &amp; Move to Next Question



MC170200890: Awwal Khan

Time Left 79 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:31 PM, 06 February 2018

Question # 3 of 10 ( Start time: 10:32:11 PM, 06 February 2018 )

Total Marks: 1

The function  $g(x) = x^2$  is

Select the correct option

Reload Math Equations

- decreasing on  $[0, \infty)$ .
- increasing on  $[0, \infty)$ .
- having negative values on  $[0, \infty)$ .
- undefined on  $[0, \infty)$ .

Click to Save Answer & Move to Next Question

MC170202886: Aqsa Zunaira

Time Left 83 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 09:46 PM, 18 January 2018

Question # 6 of 10 ( Start time: 09:47:44 PM, 18 January 2018 )

Total Marks: 1

If  $\lim_{x \rightarrow 0} f(x) = 10$  and  $\lim_{x \rightarrow 0} g(x) = -2$  then  $\lim_{x \rightarrow 0} \frac{f(x)}{g(x)}$  is

Select the correct option

Reload Math Equations

- 10
- 5
- 0
- 5

Click to Save Answer & Move to Next Question

MC170200890: Awwal Khan

Time Left 81 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:31 PM, 06 February 2018

Question # 6 of 10 ( Start time: 10:33:22 PM, 06 February 2018 )

Total Marks: 1

Generalized Mean Value Theorem says. If  $f$  and  $g$  are continuous on the closed interval  $[a, b]$  and differentiable on the open interval  $(a, b)$ , then

Select the correct option

Reload Math Equations

for some  $c$  in  $(a, b)$ .

$$[g(b) - g(a)]f'(c) = [f(b) - f(a)]g'(c)$$

for some  $c$  in  $(a, b)$ .

$$[g(b) - g(a)] = [f(b) - f(a)]g'(c)$$

 $g'(x) = 0$  for all  $x$  in  $(a, b)$ . $g'(x) = f'(x)$  for all  $x$  in  $(a, b)$ .

Click to Save Answer &amp; Move to Next Question

Time Left 84 sec(s)

Quiz Start Time: 10:03 PM, 06 February 2018

MC170202886: Aqsa Zunaira

MTH621:Quiz 4 -Lectures 30 to 37

Question # 7 of 10 ( Start time: 10:05:25 PM, 06 February 2018 )

Total Marks: 1

The derivative of the function  $x^n$  is

Select the correct option

Reload Math Equations



$x^{n-1}$



$nx^{n-1}$



$\frac{n}{x^{n-1}}$



$nx^n$

Click to Save Answer &amp; Move to Next Question

MC170201745: Shakeel Ahmad

MTH621:Quiz 3 - Lecture 23 to 27

Question # 7 of 10 ( Start time: 07:52:40 PM, 16 January 2018 )

Total Marks: 1

For the function defined as

$$f(x) = cx,$$

for every  $\epsilon > 0$  the formal definition ensures

Select the correct option

[Reload Math Equations](#)

$|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } 0 < \delta < \epsilon.$



$|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } 0 < \delta < \epsilon/|c|.$



$|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } -\epsilon < \delta < \epsilon.$



$|f(x) - cx_0| < \epsilon, \quad |x - x_0| < \delta, \text{ where } 0 < \delta < \epsilon.$

[Click to Save Answer & Move to Next Question](#)



Time Left 80 sec(s)

MC170202886: Aqsa Zunaira

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 09:46 PM, 18 January 2018

Question # 4 of 10 ( Start time: 09:47:08 PM, 18 January 2018 )

Total Marks: 1

If  $\lim_{x \rightarrow 0} f(x) = 10$  and  $\lim_{x \rightarrow 0} g(x) = -2$  then  $\lim_{x \rightarrow 0} \left(\frac{f(x)}{g(x)}\right)$  is

Select the correct option

Reload Math Equations

- 10.
- 5.
- 0.
- 5.

Click to Save Answer & Move to Next Question

Question # 5 of 10 ( Start time: 10:32:56 PM, 06 February 2018 )

Total Marks: 1

The function  $f(x) = \begin{cases} x, & 0 \leq x < 1, \\ 2, & 1 \leq x \leq 2, \end{cases}$  is

Select the correct option

[Reload Math Equations](#)

<input checked="" type="radio"/>	is nondecreasing on	$I = [0, 2]$ .
<input type="radio"/>	is nonincreasing on	$I = [0, 2]$ .
<input type="radio"/>	is having negative values on	$I = [0, 2]$ .
<input type="radio"/>	is undefined on	$I = [0, 2]$ .

[Click to Save Answer & Move to Next Question](#)

MC170202886: Aqsa Zunaira

MTH621:Quiz 4 -Lectures 30 to 37

Total Marks: 1

Question # 6 of 10 ( Start time: 10:04:50 PM, 06 February 2018 )

The function  $f(x) = \begin{cases} x, & 0 \leq x < 1, \\ 2, & 1 \leq x \leq 2, \end{cases}$  is

Select the correct option

Reload Math Equations



is nondecreasing on

$$I = [0, 2].$$



is nonincreasing on

$$I = [0, 2].$$



is having negative values on

$$I = [0, 2].$$



is undefined on

$$I = [0, 2].$$

Click to Save Answer &amp; Move to Next Question

MC170200890: Awwal Khan

MTH621:Quiz 4 -Lectures 30 to 37

Question # 9 of 10 ( Start time: 10:34:12 PM, 06 February 2018 )

Total Marks: 1

The inverse of the function  $f(x) = x^2$ , is

Select the correct option

Reload Math Equations



$$f^{-1}(y) = y^2$$



$$f^{-1}(y) = \sqrt{y}.$$



$$f^{-1}(y) = \frac{1}{x^2}$$



$$f^{-1}(y) = \frac{1}{y^2}$$

Click to Save Answer &amp; Move to Next Question

Question # 1 of 10 ( Start time: 09:46:10 PM, 18 January 2018 )

Total Marks: 1

If  $f(x) = \log x$  and  $g(x) = \frac{1}{1-x^2}$ , then  $f \circ g$  is

Select the correct option

Reload Math Equations



$$(f \circ g)(x) = \log \frac{1}{1-x^2}.$$



$$(f \circ g)(x) = \log \frac{x}{1-x^2}.$$



$$(f \circ g)(x) = \log \frac{1}{x^2}.$$



$$(f \circ g)(x) = \log \frac{-1}{1-x^2}.$$

Click to Save Answer &amp; Move to Next Question



MC170200890: Awwal Khan

MTH621:Quiz 4 -Lectures 30 to 37

Question # 4 of 10 ( Start time: 10:32:26 PM, 06 February 2018 )

Total Marks: 1

Rolle's Theorem says. suppose that  $f$  is continuous on the closed interval  $[a, b]$  and differentiable on the open interval  $(a, b)$  and  $f(a) = f(b)$ .

Select the correct option

Reload Math Equations

Then  $f'(c) = 0$  for some  $c$  in the open interval  $(a, b)$ .Then  $f'(c) \neq 0$  for some  $c$  in the open interval  $(a, b)$ .Then  $f'(c)$  exists for some  $c$  in the open interval  $(a, b)$ .Then  $f'(c) = 0$  for some  $c$  in the open interval  $(a, \infty)$ .

Click to Save Answer &amp; Move to Next Question

MC170201745: Shakool Ahmad

Time Left 38 sec(s)

MTH621:Quiz 2

Quiz Start Time: 02:06 PM, 28 November 2017

Question # 9 of 10 ( Start time: 02:14:42 PM, 28 November 2017 )

Total Marks: 1

Every Cauchy sequence has a

Select the correct option

- convergent subsequence.
- increasing subsequence.
- decreasing subsequence.
- positive subsequence.

Question # 9 of 10 ( Start time: 09:41:59 PM, 06 February 2018 )

Total Marks: 1

Generalized Mean Value Theorem says. If  $f$  and  $g$  are continuous on the closed interval  $[a, b]$  and differentiable on the open interval  $(a, b)$ , then

Select the correct option

Reload Math Equations

- |                                  |   |   |
|----------------------------------|---|---|
| <input checked="" type="radio"/> | for some $c$ in $(a, b)$ .                | $[g(b) - g(a)]f'(c) = [f(b) - f(a)]g'(c)$ |
| <input type="radio"/>            | for some $c$ in $(a, b)$ .                | $[g(b) - g(a)] = [f(b) - f(a)]g'(c)$      |
| <input type="radio"/>            | $g'(x) = 0$ for all $x$ in $(a, b)$ .     |   |
| <input type="radio"/>            | $g'(x) = f'(x)$ for all $x$ in $(a, b)$ . |   |

Click to Save Answer &amp; Move to Next Question

MC170202886: Aqsa Zunaira

Time Left 82 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 09:46 PM, 18 January 2018

Question # 2 of 10 ( Start time: 09:46:36 PM, 18 January 2018 )

Total Marks: 1

The  $\lim_{x \rightarrow 2}(3x - 5) =$

Select the correct option

Reload Math Equations

- 0.
- 1.
- 1.
- 2.

Click to Save Answer & Move to Next Question

MC170201745: Shakool Ahmad

Time Left 56 sec(s)

MTH621: Quiz 2

Quiz Start Time: 02:06 PM, 28 November 2017

Question # 6 of 10 ( Start time: 02:11:19 PM, 28 November 2017 )

Total Marks: 1

$$\limsup_{n \rightarrow \infty} s_n = \infty \text{ if}$$

Select the correct option

Reload Math Equations

- $\{s_n\}$  is not bounded above.
- $\{s_n\}$  has unique limit.
- $\{s_n\}$  is convergent.
- $\{s_n\}$  has limit inferior.



MC170202886: Aqsa Zunaira

Time Left 78 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 09:46 PM, 18 January 2018

Question # 10 of 10 ( Start time: 09:49:37 PM, 18 January 2018 )

Total Marks: 1

The value of  $x + \lim_{x \rightarrow 0^+} \frac{|x|}{x} =$

Select the correct option

Reload Math Equations

- $x - 1.$
- $x + 1.$
- $x.$
- $x + 1/x.$

Click to Save Answer & Move to Next Question

MC170201745: Shakeel Ahmad

MTH621:Quiz 3 - Lecture 23 to 27

Total Marks: 1

Question # 5 of 10 ( Start time: 07:51:09 PM, 16 January 2018 )

For the function  $f(x) = x \sin \frac{1}{x}$ ,  $x \neq 0$ , which statement is true

Select the correct option

Reload Math Equations



$$\lim_{x \rightarrow 1/\pi} f(x) = 0.$$



The function is not defined at

$$x = 0.$$



$$\lim_{x \rightarrow 0} f(x) = 1.$$



$$\lim_{x \rightarrow 0} f(x) = 0.$$

Click to Save Answer &amp; Move to Next Question

Time Left 84 sec(s)

MC170200890: Awwal Khan

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:31 PM, 06 February 2018

Question # 1 of 10 ( Start time: 10:31:47 PM, 06 February 2018 )

Total Marks: 1

$\lim_{x \rightarrow 0^+} x \log x$ , has the following indeterminate form

Select the correct option

[Reload Math Equations](#) $\infty \times \infty$ . $(0)(\infty)$ . $\frac{0}{0}$ . $0^\infty$ .[Click to Save Answer & Move to Next Question](#)

MC170202886: Aqsa Zunaira

Time Left 82 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:03 PM, 06 February 2018

Question # 8 of 10 ( Start time: 10:05:33 PM, 06 February 2018 )

Total Marks: 1

$\lim_{x \rightarrow 0^+} x \log x$ , has the following indeterminate form

Select the correct option

Reload Math Equations

- $\infty \times \infty$ .
- $(0)(\infty)$ .
- $\frac{0}{0}$ .
- $0^\infty$ .

Click to Save Answer & Move to Next Question

MC170201745: Shakeel Ahmad

Time Left 80 sec(s)

MTH621:Quiz 3 - Lecture 23 to 27

Quiz Start Time: 07:47 PM, 16 January 2018

Question # 2 of 10 ( Start time: 07:48:16 PM, 16 January 2018 )

Total Marks: 1

The  $\lim_{x \rightarrow 2}(3x - 5) =$

Select the correct option

Reload Math Equations

- 0.
- 1.
- 1.
- 2.

Click to Save Answer & Move to Next Question



MC170202886: Aqsa Zunaira

Time Left 68 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:03 PM, 06 February 2018

Question # 1 of 10 ( Start time: 10:03:05 PM, 06 February 2018 )

Total Marks: 1

If a function  $f$  is continuous on the closed interval then  $f$  attains its

Select the correct option

Reload Math Equations

- extreme values in the closed interval.
- extreme values at one point in the closed interval.
- may or may not attain extreme values in the closed interval.
- derivative in the closed interval.

Click to Save Answer & Move to Next Question

MC170200890: Awwal Khan

Time Left 80 sec(s)

MTH621:Quiz 4 -Lectures 30 to 37

Quiz Start Time: 10:31 PM, 06 February 2018

Question # 8 of 10 ( Start time: 10:33:58 PM, 06 February 2018 )

Total Marks: 1

If a function  $f$  is continuous on the closed interval then  $f$  attains its

Select the correct option

Reload Math Equations

- extreme values in the closed interval.
- extreme values at one point in the closed interval.
- may or may not attain extreme values in the closed interval.
- derivative in the closed interval.

Click to Save Answer & Move to Next Question

Question # 8 of 10 ( Start time: 07:53:43 PM, 16 January 2018 )

Total Marks: 1

The value of  $x + \lim_{x \rightarrow 0^+} \frac{|x|}{x} =$ 

Select the correct option

[Reload Math Equations](#)

$x - 1.$



$x + 1.$



$x.$



$x + 1/x.$

[Click to Save Answer & Move to Next Question](#)

Time Left 38 sec(s)

Quiz Start Time: 02:06 PM, 28 November 2017

MC170201745: Shakool Ahmad

MTH621: Quiz 2

Question # 10 of 10 ( Start time: 02:15:53 PM, 28 November 2017 )

Total Marks: 1

The limit of the sequence

$$s_n = \frac{1}{n} + \frac{2(1 + 3/n)}{1 + 1/n}$$

Reload Math Equations

Select the correct option

- 1
- 4
- 3
- 2