

If the sequence is convergent then

Select the correct option

it is bounded above but may not be bounded below.



it is bounded below but may not be bounded above.



it is bounded.



it has two limits.



Click to Save Answer & Move to Next Question





MC200403014: WAREESHA SALEEM

Time Left 89 sec(s)

MTH621:Quiz-1

Quiz Start Time: 10:22 PM, 04 June 2021

Question # 6 of 10 (Start time: 10:26:47 PM, 04 June 2021)

Total Marks: 1

Let $\sum_{n=k}^{\infty} a_n = A$ and $\sum_{n=k}^{\infty} b_n = B$, where A and B are finite.

Then $\sum_{n=k}^{\infty} (a_n + b_n) = \text{-----}$

Select the correct option

Reload Math Equations

- $\frac{A}{B}$
- AB
- $A + B$
- $A - B$

Click to Show Answer & Move to Next Question



Question # 5 of 10 (Start time: 10:26:08 PM, 04 June 2021)

Total Marks: 1

If $|x| < 1$, then

Select the correct option

[Reload Math Equations](#)

- | | |
|----------------------------------|--|
| <input type="radio"/> | $\lim_{n \rightarrow \infty} x^n = -1$ |
| <input type="radio"/> | $\lim_{n \rightarrow \infty} x^n = 1$ |
| <input type="radio"/> | None of these |
| <input checked="" type="radio"/> | $\lim_{n \rightarrow \infty} x^n = 0$ |

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

x +

r=a31fbbd3-3e0d-4519-9d60-cf9818481924

21)

If $\{s_n\}$ is a cauchy sequence of real numbers, then $\{s_n\}$ is -----.

unbounded

bounded

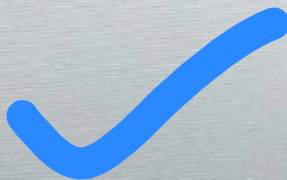


1)

If $\{x_n\}$ is -----, then $\{x_n\}$ has a convergent subsequence.

unbounded

bounded





MC200403014: WAREESHA SALEEM

Time Left 90 sec(s)

MTH621:Quiz-1

Quiz Start Time: 10:22 PM, 04 June 2021

Question # 10 of 10 (Start time: 10:30:36 PM, 04 June 2021)

Total Marks: 1

Every Cauchy sequence has a

Select the correct option

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


Click on Show Answer/Move to Next Question



Question # 6 of 10 (Start time: 10:31:22 PM, 04 June 2021)

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

Select the correct option

- | | |
|-----------------------|-------------------------------------|
| <input type="radio"/> | $\sup\{s_n\} \leq \sup\{s_{n_k}\}.$ |
| <input type="radio"/> | $\sup\{s_n\} = \sup\{s_{n_k}\}.$ |
| <input type="radio"/> | $\{s_n\}$ is convergent. |
| <input type="radio"/> | $\sup\{s_n\} \geq \sup\{s_{n_k}\}.$ |
- 



Question # 4 of 10 (Start time: 10:48:12 PM, 04 June 2021)

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

- | | |
|----------------------------------|--|
| <input type="radio"/> | All of the above. |
| <input type="radio"/> | Sequence is convergent. |
| <input type="radio"/> | $s_{n+1} - s_n = -(e^{-s_n} - e^{-s_{n-1}})$. |
| <input checked="" type="radio"/> | $0 < s_n \leq 1$ for all n . |

Click to Save Answer & M

Question # 9 of 10 (Start time: 10:51:44 PM, 04 June 2021)

Total

The series $\sum_{n=k}^{\infty} a_n$ -----, if $(-1)^n a_n > 0$, $|a_{n+1}| < |a_n|$, and $\lim_{n \rightarrow \infty} a_n = 0$.

Select the correct option

Reload Math

- diverges*
- converges*

Click to Save Answer & Move to Next Question



Question # 8 of 10 (Start time: 10:51:11 PM, 04 June 2021)

If $\{s_n\}$ is -----, then $\lim_{n \rightarrow \infty} s_n = \inf \{s_n\}$.

Select the correct option

Relo

- | | |
|-----------------------|---------------|
| <input type="radio"/> | nondecreasing |
| <input type="radio"/> | nonincreasing |
| <input type="radio"/> | decreasing |
| <input type="radio"/> | increasing |

Click to Save Answer & Move to Next

Question # 6 of 10 (Start time: 10:49:41 PM, 04 June 2021)

The series $\sum_{n=k}^{\infty} a_n$ converges, if $(-1)^n a_n > 0$, $|a_{n+1}| < |a_n|$, and $\lim_{n \rightarrow \infty} a_n = \text{-----}$.

Select the correct option

- | | |
|----------------------------------|----------|
| <input type="radio"/> | -1 |
| <input type="radio"/> | 1 |
| <input checked="" type="radio"/> | 0 |
| <input type="radio"/> | ∞ |


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

me 2021)

If $s_n \leq b$ for any sequence $\{s_n\}$, where b is a real number, then $\{s_n\}$ is -----

Bounded below

Bounded sequence


 Bounded above

click

For ----- series $\sum_{n=1}^{\infty} \frac{1}{n} = 0$.

Select the correct option

<input type="radio"/>	arithmetic
<input type="radio"/>	None of these
<input type="radio"/>	harmonic
<input type="radio"/>	geometric



If $\{s_n\}$ is -----, then $\lim_{n \rightarrow \infty} s_n = \sup \{s_n\}$.

nonincreasing

decreasing

nondecreasing




increasing

For harmonic series $\sum_{n=1}^{\infty} \frac{1}{n} = \dots$.

Select the correct option

<input type="radio"/>	None of these
<input type="radio"/>	1
<input type="radio"/>	-1
<input checked="" type="radio"/>	0



If the sequence is increasing, then it

Select the correct option

- | | |
|-----------------------|--------------------------------|
| <input type="radio"/> | diverges. |
| <input type="radio"/> | may converges to its supremum. |
| <input type="radio"/> | converges to its supremum. |
| <input type="radio"/> | is bounded. |



$\{s_n\}$ converges to -1 and $\{t_n\}$ converges to 5 . then the sequence $\{s_n + t_n\}$

Select the correct option

- will be divergent.
- may be convergent and may be divergent, it depends on the particular given sequences $\{s_n\}$ and $\{t_n\}$.
- will be convergent and its limit is 5 .
- will be convergent and its limit is 4 .



MC200404135: ASIMA MOAZZAM

MTH621: Quiz-1

Question # 1 of 10 (Start time: 10:58:49 PM, 04 June 2021)

The limit of the sequence

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

Select the correct option

- 2
- 3
- 1
- 4



Quiz-1

2 of 10 (Start time: 10:59:33 PM, 04 June 2021)

If a sequence $\{s_n\}$ is nonincreasing, then -----

the correct option

None of these

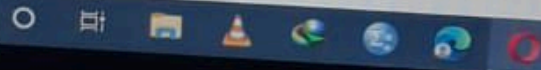
$$\lim_{n \rightarrow \infty} s_n = \infty$$

$$\lim_{n \rightarrow \infty} s_n = \sup \{s_n\}$$

$$\lim_{n \rightarrow \infty} s_n = \inf \{s_n\}$$



Type here to search



AM

00:17 PM, 04 June 2021)

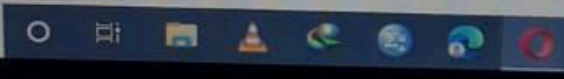
If $\{x_n\}$ unbounded below, then $\{x_n\}$ has a subsequence $\{x_{n_k}\}$ such that $\lim_{k \rightarrow \infty} x_{n_k} = \text{-----}$

∞

$-\infty$

0

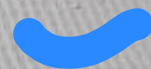
1



30 PM. 04 June 2021)

If $\{s_n\}$ is a sequence of real numbers, then $\lim_{n \rightarrow \infty} s_n = s$ iff $\lim_{n \rightarrow \infty} \sup s_n$ ----- $\lim_{n \rightarrow \infty} \inf s_n = s$.

=

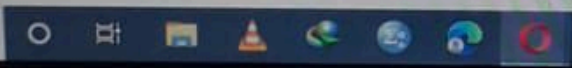


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None of these

<

Act
Go to





MC190204163: MUHAMMAD SHAFIQ

Time Left 89
sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:15 PM, 04 June 2021

Question # 3 of 10 (Start time: 11:21:57 PM, 04 June 2021)

Total Marks: 1

Every sequence $\{s_n\}$ of real numbers has a unique limit superior, \bar{s} , and a unique limit inferior, s , in the extended reals, and -----

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|------------------|
| <input type="radio"/> | $s = \bar{s}$ |
| <input type="radio"/> | None of these |
| <input type="radio"/> | $s \leq \bar{s}$ |
| <input type="radio"/> | $s \geq \bar{s}$ |

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



MC190204163: MUHAMMAD SHAFIQ

Time Left 73 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:15 PM, 04 June 2021

Question # 2 of 10 (Start time: 11:19:39 PM, 04 June 2021)

Total Marks: 1

The sum of a convergent series is -----.

Select the correct option

Reload Math Equations

- different
- unique

Click to Save Answer & Move to Next Question

MTH621: Quiz-1

Question # 8 of 10 (Start time: 11:03:02 PM, 04 June 2021)

$$\liminf_{n \rightarrow \infty} s_n = -\infty \text{ if}$$

Select the correct option

- | | |
|----------------------------------|--|
| <input type="radio"/> | $\lim_{n \rightarrow \infty} s_n = 0.$ |
| <input type="radio"/> | $\{s_n\}$ is not bounded above. |
| <input checked="" type="radio"/> | $\{s_n\}$ is not bounded below. |
| <input type="radio"/> | $\{s_n\}$ is convergent. |



Type here to search





Quiz

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MC200401222: AURANGZEB

Time Left 89 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:27 PM, 04 June 2021


Question # 6 of 10 (Start time: 11:31:39 PM, 04 June 2021)

Total Marks: 1

The series $\sum_{n=k}^{\infty} a_n$ -----, if $(-1)^n a_n > 0$, $|a_{n+1}| < |a_n|$, and $\lim_{n \rightarrow \infty} a_n = 0$.

Select the correct option

[Reload Math Equations](#)

<input type="radio"/>	<i>diverges</i>
<input type="radio"/>	<i>converges</i> 

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



Quiz

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MC200401222: AURANGZEB

Time Left 86 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:27 PM, 04 June 2021

Question # 7 of 10 (Start time: 11:32:17 PM, 04 June 2021)

Total Marks: 1

If $\{x_n\}$ is ----, then $\{x_n\}$ has a convergent subsequence.

Select the correct option

[Reload Math Equations](#)

- | | |
|----------------------------------|-----------|
| <input checked="" type="radio"/> | bounded |
| <input type="radio"/> | unbounded |

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



Quiz

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MC200401222: AURANGZEB

Time Left 90 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:27 PM, 04 June 2021

Question # 8 of 10 (Start time: 11:32:53 PM, 04 June 2021)

Total Marks: 1

Which statement is true about the sequence $s_n = (-1)^n r$

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|---|
| <input type="radio"/> | The sequence is convergent. |
| <input type="radio"/> | The sequence is divergent to $-\infty$. |
| <input type="radio"/> | The sequence is not bounded above or below. |
| <input type="radio"/> | The sequence is decreasing. |

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



Quiz

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MC200401222: AURANGZEB

Time Left 90 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:27 PM, 04 June 2021

Question # 9 of 10 (Start time: 11:33:32 PM, 04 June 2021)

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](#)

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

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



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MC200401222: AURANGZEB

Time Left 89 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:27 PM, 04 June 2021

Question # 10 of 10 (Start time: 11:34:05 PM, 04 June 2021)

Total Marks: 1

If $\sum a_n$ -----, then $\lim_{n \rightarrow \infty} a_n = 0$

Select the correct option

[Reload Math Equations](#)

<input type="radio"/>	converges
<input type="radio"/>	diverges

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



MC190204163: MUHAMMAD SHAFIQ

Time Left 85
sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:15 PM, 04 June 2021

Question # 10 of 10 (Start time: 11:36:04 PM, 04 June 2021)

Total Marks: 1

If $s_n \leq b$ for any sequence $\{s_n\}$, where b is a real number, then $\{s_n\}$ is -----

Select the correct option

Reload Math Equations

- | | |
|-----------------------|------------------|
| <input type="radio"/> | Bounded sequence |
| <input type="radio"/> | Bounded below |
| <input type="radio"/> | None of these |
| <input type="radio"/> | Bounded above |

Click to Save Answer & Move to Next Question

Question # 5 of 10 (Start time: 10:35:09 PM, 03 June 2021)

Total Marks: 1

A sequence $\{s_n\}$ of real numbers is called a Cauchy sequence if for every $\varepsilon > 0$, there is an integer N such that $|s_n - s_m| < \varepsilon$ if $m, n > N$.

Select the correct option

[Reload Math Equations](#)

<input type="radio"/>	\geq
<input type="radio"/>	\leq
<input type="radio"/>	$<$
<input type="radio"/>	$>$

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

Question # 2 of 10 (Start time: 10:33:01 PM, 03 June 2021)

Total Marks: 1

For the convergent sequence

$$\{s_n\},$$

which statement is true?

Select the correct option

[Reload Math Equations](#)

$$\limsup_{n \rightarrow \infty} s_n = \liminf_{n \rightarrow \infty} s_n = \lim_{n \rightarrow \infty} s_n.$$



$$\limsup_{n \rightarrow \infty} s_n \neq \liminf_{n \rightarrow \infty} s_n = \lim_{n \rightarrow \infty} s_n.$$



has a divergent subsequence.



$$\limsup_{n \rightarrow \infty} s_n \neq \liminf_{n \rightarrow \infty} s_n \neq \lim_{n \rightarrow \infty} s_n.$$

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

Question # 6 of 10 (Start time: 10:26:57 PM, 04 June 2021)

Total Marks: 1

If $\{s_n\}$ is bounded above and does not diverge to $-\infty$, then there is a unique real number \bar{s} such that
if $\varepsilon > 0$, $s_n > \bar{s} - \varepsilon$ -----

Select the correct option

[Reload Math Equations](#) for finitely n  for infinitely many n [Click to Save Answer & Move to Next Question](#)

Question # 9 of 10 (Start time: 10:40:12 PM, 03 June 2021)

Total Marks: 1

A divergent infinite series that does not diverge to $\pm \infty$ is said to be: - - - - -.

Select the correct option

[Reload Math Equations](#)

- | | |
|----------------------------------|----------------------|
| <input type="radio"/> | <i>None of these</i> |
| <input type="radio"/> | <i>bounded</i> |
| <input checked="" type="radio"/> | <i>oscillate</i> |
| <input type="radio"/> | <i>convergent</i> |

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

Question # 7 of 10 (Start time: 10:59:50 PM, 03 June 2021)

Total Marks: 1

If $p > 0$ and α is real, then value of the

$$\lim_{n \rightarrow \infty} \frac{n^\alpha}{(1+p)^n},$$

is

Reload Math Equations

Select the correct option

- ∞ .
- 3.
- 2.
- 0.



Question # 4 of 10 (Start time: 10:57:01 PM, 03 June 2021)

Total Marks: 1

The series $\sum_{n=k}^{\infty} a_n$ -----, if $(-1)^n a_n > 0$, $|a_{n+1}| < |a_n|$, and $\lim_{n \rightarrow \infty} a_n = 0$.

Select the correct option

Reload Math Equations

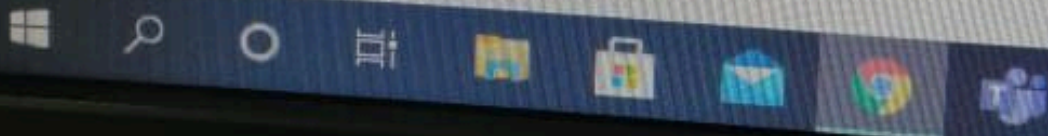
- converges*
- diverges*

Click to Save Answer & Move to Next Question

The given series $\sum_{n=1}^{\infty} \frac{1}{n}$ is -----.

Select the correct option

- | | |
|-----------------------|------------|
| <input type="radio"/> | divergent |
| <input type="radio"/> | convergent |






Question # 10 of 10 (Start time: 11:53:14 AM, 03 June 2021)

If the sequence is convergent then

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | it is bounded below but may not be bounded above. |
| <input type="radio"/> | it is bounded above but may not be bounded below. |
| <input type="radio"/> | it has two limits. |
| <input type="radio"/> | it is bounded.  |



MC200405253: AWAIS AHMED

Time Left 89 sec(s)

MTH621:Quiz-1

Quiz Start Time: 10:53 PM, 03 June 2021

Question # 1 of 10 (Start time: 10:53:48 PM, 03 June 2021)

Total Marks: 1

If $\sum a_n$ -----, then $\lim_{n \rightarrow \infty} a_n = 0$

Select the correct option

Reload Math Equations

- diverges
- converges



Click to Save Answer & Move to Next Question



MC200402273: TAJAMMAL HUSSAIN

Time Left 88 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:42 AM, 03 June 2021

Question # 1 of 10 (Start time: 11:42:35 AM, 03 June 2021)

Total Mark

If $\{a_n\}_k^\infty$ is an infinite sequence of real numbers, the symbol $\sum_{n=k}^\infty a_n$ is ----- and a_n is the n^{th} term of series.

Select the correct option

Reload Math Equations

- infinite series
- finite series

Click to Save Answer & Move to Next Question





MC200402273: TAJAMMAL HUSSAIN

Time Left 88 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:42 AM, 03 June 2021

Question # 2 of 10 (Start time: 11:44:14 AM, 03 June 2021)

Total Marks: 1

Let $\sum_{n=k}^{\infty} a_n = A$ and $\sum_{n=k}^{\infty} b_n = B$, where A and B are finite. Then $\sum_{n=k}^{\infty} ca_n = \text{-----}$

Select the correct option

Reload Math Equations

- $c - A$
- $c + A$
- cA
- $\frac{c}{A}$

Click to Save Answer & Move to Next Question





MC200402273: TAJAMMAL HUSSAIN

MTH621:Quiz-1

Quiz Start Time: 1

Question # 5 of 10 (Start time: 11:47:23 AM, 03 June 2021)

If $\{s_n\}$ is bounded above and does not diverge to $-\infty$, then there is a unique real number \bar{s} such that
if $\epsilon > 0$, $s_n < \bar{s} + \epsilon$ -----

Select the correct option

- for small n
- for large n

Click to Save Answer & Move



MTH621:Quiz-1

Question # 8 of 10 (Start time: 09:14:53 PM, 03 June 2021)

The value of the $\lim_{n \rightarrow \infty} \frac{1}{n^p}$ is

Select the correct option


- | | |
|----------------------------------|---|
| <input checked="" type="radio"/> | $\lim_{n \rightarrow \infty} \frac{1}{n^p} = 0$ for $p > 0$. |
| <input type="radio"/> | $\lim_{n \rightarrow \infty} \frac{1}{n^p} = 3$ for all p . |
| <input type="radio"/> | $\lim_{n \rightarrow \infty} \frac{1}{n^p} = 1$ for all p . |
| <input type="radio"/> | $\lim_{n \rightarrow \infty} \frac{1}{n^p} = 1$ for all $p > 1$. |

MTH621:Quiz-1

Question # 7 of 10 (Start time: 09:13:51 PM, 03 June 2021)

$$\liminf_{n \rightarrow \infty} s_n = -\infty \text{ if}$$

Select the correct option

- | | |
|----------------------------------|--|
| <input checked="" type="radio"/> | $\{s_n\}$ is not bounded below.  |
| <input type="radio"/> | $\{s_n\}$ is convergent . |
| <input type="radio"/> | $\lim_{n \rightarrow \infty} s_n = 0$. |
| <input type="radio"/> | $\{s_n\}$ is not bounded above. |



MC200402273: TAJAMMAL HUSSAIN

Time Left 89 sec(s)

MTH621:Quiz-1

Quiz Start Time: 11:42 AM, 03 June 2021

Question # 7 of 10 (Start time: 11:49:33 AM, 03 June 2021)

Total Marks: 1

If $\{s_n\}$ is -----, then $\lim_{n \rightarrow \infty} s_n = \inf \{s_n\}$.

Select the correct option

Reload Math Equations

- nonincreasing
- increasing
- decreasing
- nondecreasing

Click to Save Answer & Move to Next Question





Quiz Start Time

(, 03 June 2021)

If a sequence $\{s_n\}$ is nonincreasing, then -----

$$\lim_{n \rightarrow \infty} s_n = \sup \{s_n\}$$

$$\lim_{n \rightarrow \infty} s_n = \inf \{s_n\}$$

$$\lim_{n \rightarrow \infty} s_n = \infty$$

Click to Save Answer & M





Question # 10 of 10 (Start time: 09:16:36 PM, 03 June 2021)

Which sequence is bounded

Select the correct option

- | | |
|-----------------------|---------------------------|
| <input type="radio"/> | $\{(-1)^n\}$. |
| <input type="radio"/> | $s_n = [1 + (-1)^n]n$. |
| <input type="radio"/> | $\{n\}$. |
| <input type="radio"/> | $\{\frac{1}{n} + n^2\}$. |



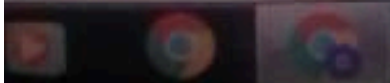
08:48:28 PM, 03 June 2021)

If $|s_n| \leq r$ for any sequence $\{s_n\}$, where r is a real number, then $\{s_n\}$ is -----

Bounded below

Bounded above

Bounded sequence





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MC200402628: UMAR FAROOQ

Time Left 89 sec(s)

MTH621:Quiz-1


Quiz Start Time: 05:05 PM, 03 June 2021

Question # 2 of 10 (Start time: 05:06:08 PM, 03 June 2021)

Total Marks: 1

If the sequence is increasing, then it

Select the correct option

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

Click to save Answer & Move to Next Question





MC200402628: UMAR FAROOQ

Time Left 82 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 1 of 10 (Start time: 05:05:07 PM, 03 June 2021)

Total Marks: 1

If $\{a_n\}_k^\infty$ is an infinite sequence of real numbers, the symbol ----- is an infinite series and is the n^{th} term of series.

Select the correct option

Reload Math Equations

- $\sum_{n=k}^\infty a_n$
- $\prod_k^\infty a_n$
- None of these
- a_n

Click to Save Answer & Move to Next Question



Question # 9 of 10 (Start time: 08:47:51 PM, 03 June 2021)

If the sequence is convergent then

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | it has two limits. |
| <input type="radio"/> | it is bounded above but may not be bounded below. |
| <input type="radio"/> | it is bounded. |
| <input type="radio"/> | it is bounded below but may not be bounded above. |





MC200402628: UMAR FAROOQ

Time Left 86 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 3 of 10 (Start time: 05:07:26 PM, 03 June 2021)

Total Marks: 1

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

Select the correct option

Reload Math Equations

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

Click to Save Answer & Move to Next Question





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MC200402628: UMAR FAROOQ

Time Left 83 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021


Question # 9 of 10 (Start time: 05:14:14 PM, 03 June 2021)

Total Marks: 1

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

Select the correct option

Reload Math Equations

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

Click to Save Answer & Move to Next Question





MC200402628: UMAR FAROOQ

Time Left 86 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 10 of 10 (Start time: 05:15:14 PM, 03 June 2021)

Total Marks: 1

A point \bar{x} is a limit point of a set iff there is a sequence $\{x_n\}$ of point in S such that $x_n \neq \bar{x}$ for $n \geq 1$, and -----

Select the correct option

Reload Math Equations

- None of these
- $\lim_{n \rightarrow \infty} x_n > \bar{x}$
- $\lim_{n \rightarrow \infty} x_n = \bar{x}$
- $\lim_{n \rightarrow \infty} x_n \neq \bar{x}$

Click to Save Answer & Move to Next Question





MC200402628: UMAR FAROOQ

Time Left 89 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 5 of 10 (Start time: 05:10:32 PM, 03 June 2021)

Total Marks: 1

If $\{x_n\}$ unbounded below, then $\{x_n\}$ has a subsequence $\{x_{n_k}\}$ such that $\lim_{k \rightarrow \infty} x_{n_k} = \text{-----}$

Select the correct option

Reload Math Equations

- ∞
- 1
- $-\infty$
- 0

Click to Save Answer & Move to Next Question





MC200402628: UMAR FAROOQ

Time Left 88 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 6 of 10 (Start time: 05:11:15 PM, 03 June 2021)

Total Marks: 1

If $|x| < 1$, then

Select the correct option

Reload Math Equations

- None of these
- $\lim_{n \rightarrow \infty} x^n = 1$
- $\lim_{n \rightarrow \infty} x^n = -1$
- $\lim_{n \rightarrow \infty} x^n = 0$



Click to Save Answer & Move to Next Question





MC200402628: UMAR FAROOQ

Time Left 88 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 8 of 10 (Start time: 05:13:29 PM, 03 June 2021)

Total Marks: 1

Which statement is true about the sequence $s_n = (-1)^n n$

Select the correct option

Reload Math Equations

- The sequence is not bounded above or below.
- The sequence is convergent.
- The sequence is divergent to $-\infty$.
- The sequence is decreasing.

Click to Save Answer & Move to Next Question





MC200402628: UMAR FAROOQ

Time Left 88 sec(s)

MTH621:Quiz-1

Quiz Start Time: 05:05 PM, 03 June 2021

Question # 4 of 10 (Start time: 05:08:49 PM, 03 June 2021)

Total Marks: 1

If $\{s_n\}$ is -----, then $\lim_{n \rightarrow \infty} s_n = \sup \{s_n\}$.

Select the correct option

Reload Math Equations

- nonincreasing
- decreasing
- nondecreasing
- increasing

Click to Save Answer & Move to Next Question

