

The volume of a cylindrical shell is given by -----.

Download More Quizzes Files From

VUAnswer.com

Select the correct option

- | | |
|-----------------------|-------------------------------------|
| <input type="radio"/> | $(\pi R^2 + \pi r^2)h$ |
| <input type="radio"/> | $(\pi R^2 r^2)h$ |
| <input type="radio"/> | $(\pi R^2 - \pi r^2)h$ |
| <input type="radio"/> | $\left(\frac{\pi R^2}{r^2}\right)h$ |



Search the web and Windows



Question # 9 of 10 (Start time: 10:25:24 PM, 15 August 2021)

Definite integral indicating the arc length of the curve $y=\cosh x$ between $x=0$ and $x=a$ is

Download More Quizzes Files From
VUAnswer.com

Select the correct option

- | | | |
|-----------------------|---|---------------------------|
| <input type="radio"/> |  | $\int_0^a 1 + \sinh x dx$ |
| <input type="radio"/> | | $\int_0^a \sinh x dx$ |
| <input type="radio"/> | | $\int_0^a \cosh x dx$ |
| <input type="radio"/> | None of these. | |



Search the web and Windows



For a sequence $\{a_n\}$ if the difference between successive terms $a_{n+1} - a_n \geq 0$ Then the sequence is known as _____

Select the correct option

- | | |
|-----------------------|----------------|
| <input type="radio"/> | Decreasing |
| <input type="radio"/> | Non increasing |
| <input type="radio"/> | Increasing |
| <input type="radio"/> | Non decreasing |



Search the web and Windows



Question # 7 of 10 (Start time: 10:22:24 PM, 15 August 2021)

Length of the arc $y=c$ from $x=0$ to $x=2$ is

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input checked="" type="radio"/>	2
<input type="radio"/>	0
<input type="radio"/>	1
<input type="radio"/>	None of these



Search the web and Windows



Question # 6 of 10 (Start time: 10:21:29 PM, 15 August 2021)

A Strictly monotone sequence is _____.

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input type="radio"/>	Increasing or decreasing
<input type="radio"/>	Non increasing
<input type="radio"/>	Both a and b
<input type="radio"/>	Non decreasing



Search the web and Windows



Question # 5 of 10 (Start time: 10:19:51 PM, 15 August 2021)

Arc length of the curve $y=4x$ from $x=0$ to $x=1$ is _____

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input type="radio"/>	Sqrt(17)
<input type="radio"/>	Sqrt(10)
<input type="radio"/>	None of the above
<input type="radio"/>	0



Search the web and Windows





Derivative of $f(x) = a - 7$, where a is a constant is....

Select the correct option

- | | |
|-----------------------|---------|
| <input type="radio"/> | $a - 7$ |
| <input type="radio"/> | -7 |
| <input type="radio"/> | a |
| <input type="radio"/> | 0 |

Click on Your Answer & Move to Next Question

Download More Quizzes Files From
VUAnswer.com

The graphs of the smooth functions are _____

Select the correct option

<input type="radio"/>	Smooth Graph
<input type="radio"/>	Polygon
<input type="radio"/>	Straight Lines
<input type="radio"/>	Smooth Curves



Search the web and Windows





Quiz

quiz.vu.edu.pk



BC210200405: ABDULLAH WASEEM

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 04:24 PM, 15 August 2021

Question # 2 of 10 (Start time: 04:26:30 PM, 15 August 2021)

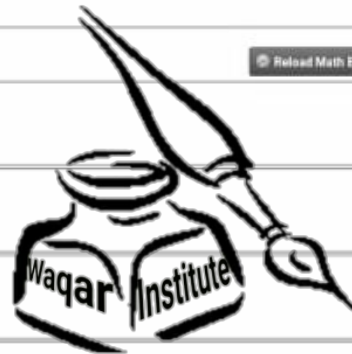
Total Marks: 1

Use L'Hospital's rule to evaluate the $\lim_{x \rightarrow 0} \frac{\sin 2x}{x} =$ _____.

Select the correct option

Reload Math Equations

<input type="radio"/>	1
<input type="radio"/>	3
<input type="radio"/>	2
<input type="radio"/>	4

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

Question # 3 of 10 (Start time: 10:16:56 PM, 15 August 2021)

Arc length of the curve $y=1$ from $x=a$ to $x=b$ is

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input type="radio"/>	$b-a$
<input type="radio"/>	$2(b-a)$
<input type="radio"/>	$a-b$
<input type="radio"/>	0



Search the web and Windows





Quiz

quiz.vu.edu.pk



BC210200405: ABDULLAH WASEEM

MTH101:Quiz 3


Question # 2 of 10 (Start time: 04:26:30 PM, 15 August 2021)

Use L'Hospital's rule to evaluate the $\lim_{x \rightarrow 0} \frac{\sin 2x}{x} = \underline{\hspace{2cm}}$.

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input type="radio"/>	1
<input type="radio"/>	3
<input type="radio"/>	2
<input type="radio"/>	4





If the interval $[3,7]$ is divided into '4' equal subintervals ,then left endpoint of each subinterval will be.....

Select the correct option

- | | |
|-----------------------|---------|
| <input type="radio"/> | 3,6,8,9 |
| <input type="radio"/> | 3,4,5,6 |
| <input type="radio"/> | 5,6,7,8 |
| <input type="radio"/> | 4,5,6,7 |

Download More Quizzes Files From
VUAnswer.com





If $[-8,8]$ is subdivided into '16' equally spaced subintervals, then the RIGHT end point of 13th sub-interval will be-----.

Select the correct option

<input type="radio"/>	4
<input type="radio"/>	2
<input type="radio"/>	3
<input type="radio"/>	5

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

Download More Quizzes Files From
VUAnswer.com



MTH101:Quiz 3

Question # 5 of 10 (Start time: 04:30:21 PM, 15 August 2021)

The volume by the washer perpendicular to the x-axis is

Select the correct option



$$\int_a^b \pi([f(x)] + [g(x)])dx$$



$$\int_a^b \pi([f(x)]^2 - [g(x)]^2)dx$$



$$\int_a^b ([f(x)]^2 - [g(x)]^2)dy$$



$$\int_a^b \pi([f(x)]^2 + [g(x)]^2)dx$$



A function is a function that has continuous derivatives up to some desired order over some domain.

Download More Quizzes Files From
VUAnswer.com

Select the correct option

- | | |
|-----------------------|------------|
| <input type="radio"/> | Smooth |
| <input type="radio"/> | Non smooth |



Click to Save Answer & Move to Next Question



A monotone sequence is either non decreasing or _____.

Select the correct option

- | | |
|-----------------------|---------------------------|
| <input type="radio"/> | Non decreasing |
| <input type="radio"/> | Increasing and decreasing |
| <input type="radio"/> | Non increasing |
| <input type="radio"/> | None of the above |



BC210200405: ABDULLAH WASEEM

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 04:24 PM, 15 August 2021

Question # 9 of 10 (Start time: 04:35:14 PM, 15 August 2021)

Total Marks: 1

Sequence is the function whose _____ is the set of positive integers.

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input type="radio"/>	Range
<input type="radio"/>	Domain



Click to Save Answer & Move to Next Question



Integral of $(1-2x)$ from $[0,1]$ is

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | 0 |
| <input type="radio"/> | 3 |
| <input type="radio"/> | 1 |
| <input type="radio"/> | 2 |

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

Download More Quizzes Files From
VUAnswer.com



Arc length of the curve $y=1$ from $x=0$ to $x=1$ is.....

Select the correct option

- | | |
|-----------------------|----|
| <input type="radio"/> | 2 |
| <input type="radio"/> | 1 |
| <input type="radio"/> | -1 |
| <input type="radio"/> | 0 |



Question # 2 of 10 (Start time: 05:27:49 PM, 15 August 2021)

Total Marks: 1

Let $\{a_n\}$ be the sequence defined by $a_1 = 1$ the recursion formula is _____.

Select the correct option

Reload Math Equations



$$a_{n+1} = \frac{1}{2}(a_n - 3/a_n) \quad \text{for } n \geq 1$$



$$a_{n+1} = \frac{1}{2}(a_n + 3/a_n) \quad \text{for } n \geq 1$$



Click to Save Answer & Move to Next Question



BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 1 of 10 (Start time: 05:27:05 PM, 15 August 2021)

Total Marks: 1

To get better approximation to actual area under a continuous curve over a closed interval, we have to increase

Select the correct option

- | | | |
|-----------------------|---------------------------|----|
| <input type="radio"/> | Width of the subintervals | // |
| <input type="radio"/> | Number of subintervals | // |
| <input type="radio"/> | Size of the interval | // |
| <input type="radio"/> | Total area | // |

Click to Save Answer & Move to Next Question



BC210202411: MUHAMMAD HAMZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 04:58 PM, 15 August 2021

Question # 1 of 10 (Start time: 04:58:23 PM, 15 August 2021)

Total Marks: 1

Sequence is the function whose _____ is the set of positive integers.

Select the correct option



Range



Domain



Click to Save Answer & Move to Next Question



BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 3 of 10 (Start time: 05:28:26 PM, 15 August 2021)

Total Marks: 1

The value of $\int_0^1 e^{-x} dx$ _____.

Select the correct option

Reload Math Equations

- | | |
|-----------------------|-------------------|
| <input type="radio"/> | $\frac{1+e}{e}$ |
| <input type="radio"/> | None of the above |
| <input type="radio"/> | $\frac{1-e}{e}$ |
| <input type="radio"/> | $\frac{e-1}{e}$ |



Click to Save Answer & Move to Next Question

BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 4 of 10 (Start time: 05:29:13 PM, 15 August 2021)

Total Marks: 1

By the use of L'Hospital's rule the value of $\lim_{x \rightarrow 0} \frac{e^x - e^{-x}}{\sin x} =$ _____.

Select the correct option

Reload Math Equations

- | | |
|-----------------------|----|
| <input type="radio"/> | 0 |
| <input type="radio"/> | 1 |
| <input type="radio"/> | -2 |
| <input type="radio"/> | 2 |



Click to Save Answer & Move to Next Question

Question # 5 of 10 (Start time: 05:29:51 PM, 15 August 2021)

Total Marks: 1

If $[-8, 8]$ is subdivided into '16' equally spaced subintervals, then the RIGHT end point of 13th sub-interval will be-----.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | 5 |
| <input type="radio"/> | 2 |
| <input type="radio"/> | 3 |
| <input type="radio"/> | 4 |



Download More Quizzes Files From
VUAnswer.com

Click to Save Answer & Move to Next Question

BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 6 of 10 (Start time: 05:30:17 PM, 15 August 2021)

Total Marks: 1

Find the area between $y = x$ and $y = -x(x - 4)$.

Select the correct option

Reload Math Equations

☐

0

☐ $\frac{7}{2}$ ☐

None of these

☐ $\frac{9}{2}$ 

Click to Save Answer & Move to Next Question

Sunday, August 15, 2021

BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 86 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 9 of 10 (Start time: 05:32:53 PM, 15 August 2021)

Total Marks: 1

The value of

$$\int_{-2}^2 |x| dx \text{ _____.}$$

Select the correct option

Reload Math Equations

4

☐

-4

☐

2

☐

0

☐

Download More Quizzes Files From
VUAnswer.com



Click to Save Answer & Move to Next Question

BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 87 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 7 of 10 (Start time: 05:31:01 PM, 15 August 2021)

Total Marks: 1

The value of $\lim_{x \rightarrow a} \frac{\ln(x-a)}{\ln(e^x - e^a)} =$ _____.

Select the correct option

Reload Math Equations

<input type="radio"/>	1
<input type="radio"/>	$2e^x$
<input type="radio"/>	0
<input type="radio"/>	$2e^a$



Click to Save Answer & Move to Next Question

BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 10 of 10 (Start time: 05:33:33 PM, 15 August 2021)

Total Marks: 1

For a sequence $\{a_n\}$ if the difference between successive terms $a_{n+1} - a_n \geq 0$ Then the sequence is known as _____.

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|----------------|
| <input type="radio"/> | Decreasing |
| <input type="radio"/> | Non decreasing |
| <input type="radio"/> | Increasing |
| <input type="radio"/> | Non increasing |

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

BC210206508: MUHAMMAD AHMED FAYYAZ

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:27 PM, 15 August 2021

Question # 8 of 10 (Start time: 05:31:57 PM, 15 August 2021)

Total Marks: 1

Forms of L'Hospital's rule are _____

Select the correct option

- | | |
|-----------------------|------------------|
| <input type="radio"/> | 0. = |
| <input type="radio"/> | All of the above |
| <input type="radio"/> | 0/0 |
| <input type="radio"/> | =/ = |



Click to Save Answer & Move to Next Question

or answer within 60 seconds. While attempting a question, keep an eye on the clock. You must select the best option.

Download More Quizzes Files From
VUAnswer.com

question. But remember that you have to complete the quiz before expiry

Start Quiz

28°C Light rain

5:37 AM
8/15/2021

The value of $\int_0^1 e^{-x} dx$ _____.

Select the correct option

<input type="radio"/>	$\frac{1-e}{e}$
<input type="radio"/>	$\frac{1+e}{e}$
<input type="radio"/>	$\frac{e-1}{e}$
<input type="radio"/>	None of the above



Type here to search



MTH101:Quiz 3

Question # 1 of 10 (Start time: 05:41:30 PM, 15 August 2021)

The L'Hospital's rule $\lim \frac{f(x)}{g(x)} =$ _____.

Select the correct option

- | | |
|-----------------------|----------------------------|
| <input type="radio"/> | $\lim \frac{f'(x)}{g(x)}$ |
| <input type="radio"/> | $\lim \frac{f'(x)}{g'(x)}$ |
| <input type="radio"/> | None of the above |
| <input type="radio"/> | $\lim \frac{f(x)}{g'(x)}$ |



Type here to search



Download More Quizzes Files From
VUAnswer.com

Click for Quiz in VULMS.

It is recommended that you should save your answer within 60 seconds. While attempting a question, keep an eye on the timer. When moving to the next question, make sure that you have selected the best option.

from the question next to the last shown question. But remember that you have to complete the quiz before expiry

Start Quiz



33°C Haze



5:41 AM
8/15/2021



Antiderivative of $\cos x$ is

Select the correct option

- | | |
|-----------------------|-------------------|
| <input type="radio"/> | $\sin x + c$ |
| <input type="radio"/> | $\cos x + \sin x$ |
| <input type="radio"/> | $\cos x + c$ |
| <input type="radio"/> | $x \sin x$ |



Type here to search



Length of the curve $y=3x$ from $x=0$ to $x=1$ is.....

Select the correct option

- | | |
|-----------------------|-------------------|
| <input type="radio"/> | 0 |
| <input type="radio"/> | None of these |
| <input type="radio"/> | $\text{Sqrt}(5)$ |
| <input type="radio"/> | $\text{Sqrt}(10)$ |



Type here to search



Question # 4 of 10 (Start time: 05:43:30 PM, 15 August 2021)

Length of the arc $y=c$ from $x=0$ to $x=2$ is

Select the correct option

<input type="radio"/>	0
<input type="radio"/>	2
<input type="radio"/>	1
<input type="radio"/>	None of these



Type here to search



Question # 7 of 10 (Start time: 05:46:11 PM, 15 August 2021)

The length of the WHOLE polygonal path will be _____.

Select the correct option



☐
$$\sum_{k=1}^n L_k = \lim_{\max \Delta x \rightarrow 0} \sum_{k=1}^n \sqrt{1 + (f'(x_k))^2} dx$$

☐
$$\sum_{k=1}^n L_k = \sum_{k=1}^n \sqrt{1 + (f'(x_k))^2}$$

☐
$$\sum_{k=1}^n L_k = \sum_{k=1}^n \sqrt{1 + (f'(x_k))^2} \Delta x_k$$

☐ None of the above

[Click to Save Answer & Move](#)



Type here to search



33°C Haze

Question # 5 of 10 (Start time: 05:44:12 PM, 15 August 2021)

To get better approximation to actual area under a continuous curve over a closed interval, we have to increase

Select the correct option

<input type="radio"/>	Number of subintervals
<input type="radio"/>	Size of the interval
<input type="radio"/>	Total area
<input type="radio"/>	Width of the subintervals



The value of $\lim_{x \rightarrow a} \frac{\ln \tan x}{\ln x} = \underline{\hspace{2cm}}$.

Select the correct option

<input type="radio"/>	1
<input type="radio"/>	0
<input type="radio"/>	2
<input type="radio"/>	4



Type here to search





BC200418771: MOHSIN RAZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 1 of 10 (Start time: 05:51:43 PM, 15 August 2021)

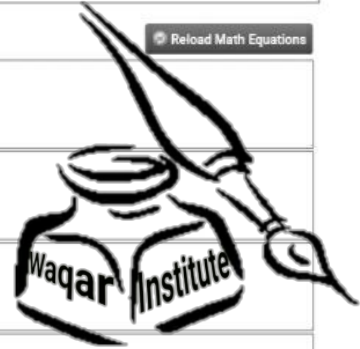
Total Marks: 1

Find the area between $y = x$ and $y = -x(x - 4)$.

Select the correct option

Reload Math Equations

<input type="radio"/>	None of these
<input type="radio"/>	$\frac{7}{2}$
<input type="radio"/>	$\frac{9}{2}$
<input type="radio"/>	0



Click to Save Answer & Move to Next Question

When we check the

$$\lim \frac{f(x)}{g(x)}$$

is an intermediate form then we used L'Hospital's rule.

Select the correct option

<input type="radio"/>	False
<input type="radio"/>	True



Type here to search



The value of $\lim_{x \rightarrow 0} \frac{e^{x^2} - 1}{\cos x - 1} = \underline{\hspace{2cm}}$.

Select the correct option

<input type="radio"/>	∞
<input type="radio"/>	-2
<input type="radio"/>	0
<input type="radio"/>	2



Type here to search





BC200418771: MOHSIN RAZA

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 2 of 10 (Start time: 05:52:48 PM, 15 August 2021)

Total Marks: 1

Derivative of $f(x) = a - 7$, where a is a constant is....

Select the correct option

<input type="radio"/>	$a - 7$
<input type="radio"/>	a
<input type="radio"/>	0
<input type="radio"/>	-7



Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 3 of 10 (Start time: 05:53:49 PM, 15 August 2021)

Total Marks: 1

The volume V of a cylinder with base area A and height h is calculated by -----.

Select the correct option

- | | |
|-----------------------|-------------|
| <input type="radio"/> | $V = A h$ |
| <input type="radio"/> | $V = A h^2$ |
| <input type="radio"/> | $V = A h^3$ |
| <input type="radio"/> | $V = 2A h$ |



Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 4 of 10 (Start time: 05:54:47 PM, 15 August 2021)

Total Marks: 1

Antiderivative of $\cos x$ is

Select the correct option

- | | |
|-----------------------|-------------------|
| <input type="radio"/> | $\cos x + \sin x$ |
| <input type="radio"/> | $\sin x + c$ |
| <input type="radio"/> | $x \sin x$ |
| <input type="radio"/> | $\cos x + c$ |

Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 8 of 10 (Start time: 05:58:12 PM, 15 August 2021)

Total Marks: 1

Arc length of the curve $y=x$ from $x=0$ to $x=2$ is ____.

Select the correct option

Reload Math Equations

<input type="radio"/>	8
<input type="radio"/>	0
<input type="radio"/>	4
<input type="radio"/>	$\sqrt{2}$



Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 6 of 10 (Start time: 05:57:03 PM, 15 August 2021)

Total Marks: 1

Distance between (3,-2) and (4,0) using the distance formula is.....

Select the correct option

- | | |
|-----------------------|----------------|
| <input type="radio"/> | sqrt (3) |
| <input type="radio"/> | 0 |
| <input type="radio"/> | sqrt (5) |
| <input type="radio"/> | None of these. |

Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 84 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 5 of 10 (Start time: 05:56:07 PM, 15 August 2021)

Total Marks: 1

Arc length of the smooth curve $x=g(y)$ for $y=a$ to $y=b$ is.....

Select the correct option

Reload Math Equations

- | | |
|-----------------------|---|
| <input type="radio"/> | $L = \int_a^b \sqrt{1 + \left(\frac{dy}{dx}\right)^2} dx$ |
| <input type="radio"/> | $L = \int_a^b \sqrt{1 + \left(\frac{dx}{dy}\right)^2} dy$ |



Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 9 of 10 (Start time: 05:58:56 PM, 15 August 2021)

Total Marks: 1

Length of the curve $y=3x$ from $x=0$ to $x=1$ is.....

Select the correct option

- | | |
|-----------------------|----------------|
| <input type="radio"/> | Sqrt(10) |
| <input type="radio"/> | Sqrt(5) |
| <input type="radio"/> | 0 |
| <input type="radio"/> | None of these. |

Click to Save Answer & Move to Next Question



BC200418771: MOHSIN RAZA

Time Left 89 sec(s)

MTH101:Quiz 3

Quiz Start Time: 05:51 PM, 15 August 2021

Question # 10 of 10 (Start time: 05:59:38 PM, 15 August 2021)

Total Marks: 1

Forms of L'Hospital's rule are ____.

Select the correct option

<input type="radio"/>	0/0
<input type="radio"/>	All of the above
<input type="radio"/>	∞/∞
<input type="radio"/>	0. ∞



Click to Save Answer & Move to Next Question



If $[-8, 8]$ is subdivided into '16' equally spaced subintervals, then the RIGHT end point of 13th sub-interval will be-----.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | 5 |
| <input type="radio"/> | 4 |
| <input type="radio"/> | 2 |
| <input type="radio"/> | 3 |

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



Question # 4 of 10 (Start time: 06:05:40 PM, 15 August 2021)

For a sequence $\{a_n\}$ if the ratio of successive terms $\frac{a_{n+1}}{a_n} \leq$ then the sequence is known as ____.

Select the correct option

<input type="radio"/>	Increasing
<input type="radio"/>	Non increasing
<input type="radio"/>	Non decreasing
<input type="radio"/>	Decreasing



Download More Quizzes Files From
VUAnswer.com



Question # 3 of 10 (Start time: 06:04:41 PM, 15 August 2021)

Arc length of the curve $y=x$ from $x=0$ to $x=2$ is ____.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | $\int_0^2 \sqrt{1 + \left[\frac{d}{dx}(x)\right]^2} dx$ |
| <input type="radio"/> | $\int_0^2 \sqrt{1 + [1]^2} dx$ |
| <input type="radio"/> | All of the above |
| <input type="radio"/> | $\int_0^2 \sqrt{1 + \left[\frac{dy}{dx}\right]^2} dx$ |





Quiz
quiz.vu.edu.pk



Definite integral indicating the arc length of the curve $y = x^2$ between $x = 0$ and $x = 2$ is

Which of the following is the correct option

- | | |
|-----------------------|-----------------------------------|
| <input type="radio"/> | None of these. |
| <input type="radio"/> | $L = \int_0^2 x dx$ |
| <input type="radio"/> | $L = \int_0^2 \sqrt{1 + 4x^2} dx$ |
| <input type="radio"/> | $L = \int_0^2 \sqrt{1 + 2x^2} dx$ |

Click to Save Answer



Length of the curve $y = \sin(x)$ from $x = 0$ to $x = \pi$ is

the correct option

$$\int_0^{\pi} \sqrt{1 + \cos^2 x} dx$$

$$\int_0^{\pi} \sqrt{1 - \cos x} dx$$

None of these.

$$\int_0^{\pi} \sqrt{\cos x} dx$$



Click to



Question # 6 of 10 (Start time: 06:08:02 PM, 15 August 2021)

Distance between (3,-2) and (4,0) using the distance formula is.....

Select the correct option



sqrt (5)



None of these.



sqrt (3)



0

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



BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3


Quiz Start Time: 06:10 PM, 15 August 2021

Question # 1 of 10 (Start time: 06:10:59 PM, 15 August 2021)

Total Marks: 1

Arc length of the curve $y=1$ from $x=0$ to $x=1$ is.....

Select the correct option

- | | |
|-----------------------|----|
| <input type="radio"/> | -1 |
| <input type="radio"/> | 0 |
| <input type="radio"/> | 1 |
| <input type="radio"/> | 2 |
- 

Click to Save Answer & Move to Next Question



No internet connection



quiz.vu.edu.pk/QuizQue

1



BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 2 of 10 (Start time: 06:11:50 PM, 15 August 2021)

Total Marks: 1

The value of $\lim_{x \rightarrow 0} \frac{(e^{x^2}) - 1}{(\cos x - 1)}$ is

Select the correct option

Reload Math Equations

- | | |
|-----------------------|----------|
| <input type="radio"/> | -2 |
| <input type="radio"/> | 2 |
| <input type="radio"/> | 0 |
| <input type="radio"/> | ∞ |

Click to Save Answer & Move to Next Question





BC200200158: MUHAMMAD USMAN EHSAN

Time Left 71 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 2 of 10 (Start time: 06:11:50 PM, 15 August 2021)

Total Marks: 1

The value of $\lim_{x \rightarrow 0} \frac{(e^{x^2} - 1)}{(\cos x - 1)}$ is _____

Select the correct option

Reload Math Equations

- | | |
|----------------------------------|----------|
| <input type="radio"/> | -2 |
| <input type="radio"/> | 2 |
| <input type="radio"/> | 0 |
| <input checked="" type="radio"/> | ∞ |



Click to Save Answer & Move to Next Question



If the interval $[3,7]$ is divided into '4' equal subintervals ,then left endpoint of each subinterval will be.....

Select the correct option

- | | |
|-----------------------|---------|
| <input type="radio"/> | 5,6,7,8 |
| <input type="radio"/> | 3,4,5,6 |
| <input type="radio"/> | 3,6,8,9 |
| <input type="radio"/> | 4,5,6,7 |



No internet connection



quiz.vu.edu.pk/QuizQue

1



BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 4 of 10 (Start time: 06:14:34 PM, 15 August 2021)

Total Marks: 1

 $\int_0^\pi \text{Length of the curve } y = \sin(x) \text{ from } x = 0 \text{ to } x = \pi \text{ is } \dots \pi$

Select the correct option

Reload Math Equations

- ☐ $\int_0^\pi \sqrt{\cos x} \, dx$
- ☐ None of these.
- ☐ $\int_0^\pi \sqrt{1 + \cos x} \, dx$
- ☐ $\int_0^\pi \sqrt{1 + \cos^2 x} \, dx$

Click to Save Answer & Move to Next Question




**Question # 10 of 10 (Start time: 06:14:12 PM, 15 August 2021)**

By the use of L'Hospital's rule the value of $\lim_{x \rightarrow \infty} \frac{x}{e^x} =$ _____

Select the correct option

<input type="radio"/>	3
<input type="radio"/>	0
<input type="radio"/>	2
<input type="radio"/>	1





BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 3 of 10 (Start time: 06:13:41 PM, 15 August 2021)

Total Marks: 1

If $[-8,8]$ is subdivided into '16' equally spaced subintervals, then the RIGHT end point of 13th sub-interval will be-----.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | 4 |
| <input type="radio"/> | 3 |
| <input type="radio"/> | 5 |
| <input type="radio"/> | 2 |

Click to Save Answer & Move to Next Question





BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 5 of 10 (Start time: 06:15:19 PM, 15 August 2021)

Total Marks: 1

Sequence is the function whose _____ is the set of positive integers.

Download More Quizzes Files From
VUAnswer.com

Select the correct option

<input type="radio"/>	Domain
<input type="radio"/>	Range



Click to Save Answer & Move to Next Question





quiz.vu.edu.pk/QuizQue

1



BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 6 of 10 (Start time: 06:15:55 PM, 15 August 2021)

Total Marks: 1

For a sequence $\{a_n\}$ if the ratio of successive terms $\frac{a_{n+1}}{a_n} \leq 1$ then the sequence is known as _____.

Select the correct option

Reload Math Equations

- | | |
|-----------------------|----------------|
| <input type="radio"/> | Increasing |
| <input type="radio"/> | Non increasing |
| <input type="radio"/> | Non decreasing |
| <input type="radio"/> | Decreasing |

Click to Save Answer & Move to Next Question





BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 7 of 10 (Start time: 06:16:42 PM, 15 August 2021)

Total Marks: 1

Length of the curve $y=3x$ from $x=0$ to $x=1$ is.....

Select the correct option

- | | |
|-----------------------|----------------|
| <input type="radio"/> | None of these. |
| <input type="radio"/> | Sqrt(10) |
| <input type="radio"/> | 0 |
| <input type="radio"/> | Sqrt(5) |



Click to Save Answer & Move to Next Question





BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 10 of 10 (Start time: 06:18:39 PM, 15 August 2021)

Total Marks: 1

By the use of L'Hospital's rule the value of $\lim_{x \rightarrow 0} \frac{(e^x - e^{-x})}{(\sin x)}$ is _____.

Download More Quizzes Files From

VUAnswer.com

Select the correct option

Reload Math Equations

<input type="radio"/>	1
<input type="radio"/>	0
<input type="radio"/>	2
<input type="radio"/>	-2

Click to Save Answer & Move to Next Question





BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 9 of 10 (Start time: 06:18:03 PM, 15 August 2021)

Total Marks: 1

The given sequence $\lim_{n \rightarrow \infty} \frac{n}{(n+1)}$ will be_____

Select the correct option

Reload Math Equations

<input type="radio"/>	Converge
<input type="radio"/>	Diverge

Click to Save Answer & Move to Next Question



No internet connection



quiz.vu.edu.pk/QuizQue

1



BC200200158: MUHAMMAD USMAN EHSAN

Time Left 90 sec(s)

MTH101:Quiz 3

Quiz Start Time: 06:10 PM, 15 August 2021

Question # 8 of 10 (Start time: 06:17:22 PM, 15 August 2021)

Total Marks: 1

The value of $\lim_{x \rightarrow a} \frac{\ln \tan x}{\ln x} = \text{_____}$

Select the correct option

Reload Math Equations

<input type="radio"/>	1
<input type="radio"/>	0
<input type="radio"/>	2
<input type="radio"/>	4

Click to Save Answer & Move to Next Question



Question # 1 of 10 (Start time: 06:19:28 PM, 15 August 2021)

The volume by the washer perpendicular to the x-axis is

Select the correct option

- | | |
|-----------------------|-------------------------------------|
| <input type="radio"/> | $\int_a^b \pi (f(x)^2 - g(x)^2) dy$ |
| <input type="radio"/> | $\int_a^b \pi (f(x) + g(x)) dx$ |
| <input type="radio"/> | $\int_a^b \pi (f(x)^2 + g(x)^2) dx$ |
| <input type="radio"/> | $\int_a^b \pi (f(x)^2 - g(x)^2) dx$ |

Download More Quizzes Files From
VUAnswer.com



Question # 3 of 10 (Start time: 06:23:11 PM, 15 August 2021)

Arc length of the curve $y = x^{3/2}$ on $[1,3]$ is _____

Select the correct option

☐ $\int_1^3 \sqrt{1 + \left[\frac{d}{dx} (x^{3/2}) \right]} dx$

☐ $\int_1^3 \sqrt{1 + \left[\frac{d}{dx} (x^{3/2}) \right]^2} dx$

Question # 1 of 10 (Start time: 06:19:28 PM, 15 August 2021)

The volume by the washer perpendicular to the x-axis is

Select the correct option



$$\int_a^b ([f(x)]^2 - [g(x)]^2) dy$$



$$\int_a^b \pi([f(x)] + [g(x)]) dx$$

Download More Quizzes Files From
VUAnswer.com



$$\int_a^b \pi([f(x)]^2 + [g(x)]^2) dx$$



$$\int_a^b \pi([f(x)]^2 - [g(x)]^2) dx$$

Question # 4 of 10 (Start time: 06:26:43 PM, 15 August 2021)

Let f is a smooth function on $[0,3]$ what will be the arc length L of the curve $y=f(x)$ from $x=0$ and $x=3$.

Select the correct option

☐ $\int_0^3 \sqrt{1 + [f'(x)]^2} dx$

☐ $\int_a^b \sqrt{1 + [f'(x)]^2} dy$

☐ $\int_0^3 \sqrt{1 + [f'(x)]^2} dy$

☐ $\int_0^3 \sqrt{1 + [f(x)]^2} dy$



Question # 2 of 10 (Start time: 00:00:00)

Arc length of the curve $y=7$ from $x=0$ to $x=1$ is _____.

Select the correct option



2



-1



-2



1



Use L'Hospital's rule to evaluate the $\lim_{x \rightarrow 0} \frac{\sin 2x}{x} = \underline{\hspace{2cm}}$.

Select the correct option

- | | |
|-----------------------|---|
| <input type="radio"/> | 2 |
| <input type="radio"/> | 3 |
| <input type="radio"/> | 1 |
| <input type="radio"/> | 4 |

Question # 8 of 10 (Start time: 06:33:31 PM, 15 August 2021)

If f is a smooth function on $[a, b]$ then arc length of the curve $y=f(x)$ from $x=a$ to $x=b$ is _____

Select the correct option



$$L = \int_a^b \sqrt{1 + \frac{dy}{dx}} dx$$



$$L = \int_a^b \sqrt{1 + \left(\frac{dy}{dx}\right)^2} dx$$



Type here to search



Question # 7 of 10 (100%)

A Strictly monotone sequence is _____.

Select the correct option



Both a and b



Non decreasing



Non increasing



Increasing or decreasing



Question # 6 of 10 (Start time: 06:30:10 PM, 15 August 2021)

Mathematically second fundamental theorem of calculus can be written as,

Select the correct option



$$\frac{d}{dx} \int_a^x f(t) dt = f'(x)$$



None of these



$$\frac{d}{dx} \int_a^x f(t) dt = f(x)$$



$$\frac{d}{dx} \int_a^x f(t) dt = f(x)$$

Go to solution



Type here to search



Question # 9 of 10 (Start time: 06:35:17 PM, 15 August 2021)

By the use of L'Hospital's rule the value of $\lim_{x \rightarrow 0} \frac{e^x - e^{-x}}{\sin x} =$ _____.

Select the correct option

☐ 0

☐ 1

☐ 2

☐ -2

Question # 10 of 10 (Start time: 06:37:00 PM, 15 August 2021)

Arc length of the curve $y=1$ from $x=0$ to $x=1$ is.....

Select the correct option

☐ 1

☐ 2

☐ 0

☐ -1





Start Quiz

quiz.vu.edu.pk



Quiz 3

Total Questions : 10

Announcement

It has come to the University's knowledge that some students are using unfair means while attempting their Mid-Term quiz.

The University is monitoring & analyzing the quiz attempts and if a student is found involved in using unfair means,

i.e., helping tools/software, Web Extension, Add-ons etc., an Unfair Means Case (UMC) will be made against such student(s)

including cancellation of their Mid-Term quiz.

Please read the following instructions carefully!

1. Quiz will be based upon Multiple Choice Questions (MCQs).
2. You have to attempt the quiz online. You can start attempting the quiz any time within given date(s) of a particular subject by clicking the link for Quiz in VULMS.
3. Each question has a fixed time of 90 seconds. So you have to save your answer before 90 seconds. But due to unstable internet speeds, it is recommended that you should save your answer within 60 seconds. While attempting a question, keep an eye on the remaining time.
4. Attempting quiz is unidirectional. Once you move forward to the next question, you can not go back to the previous one. Therefore before moving to the next question, make sure that you have selected the best option.
5. **DO NOT** press **Back Button / Backspace Button** while attempting a question, otherwise you will lose that question.
6. **DO NOT** refresh the page unnecessarily, **specially** when following messages appear
 - Saving...
 - Question Timeout: Now loading next question...
7. Javascript **MUST** be enabled in your browser; otherwise you will not be able to attempt the quiz.
8. If for any reason, you lose access to internet (like power failure or disconnection of internet), you will be able to attempt the quiz again from the question next to the last shown question. But remember that you have to complete the quiz before expiry of the deadline.
9. If any student failed to attempt the quiz in given time then no re-take or offline quiz will be held.

[Start Quiz](#)



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left 86 sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 3 of 10 (Start time: 08:07:29 PM, 15 August 2021)

Total Marks: 1

The value of $\lim_{x \rightarrow 0} \frac{\ln(x-a)}{\ln(e^x - e^a)}$ = _____

Select the correct option

Reload Math Equations

<input type="radio"/>	0
<input type="radio"/>	$2e^a$
<input type="radio"/>	1
<input type="radio"/>	$2e^0$



Click to Save Answer & Move to Next Question

Download More Quizzes Files From
VUAnswer.com



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

89

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 2 of 10 (Start time: 08:05:13 PM, 15 August 2021)

Total Marks: 1

Arc length of the smooth curve $x=g(y)$ for $y=a$ to $y=b$ is.....

Select the correct option

Reload Math Equations



$$L = \int_a^b \sqrt{1 + \left(\frac{dy}{dx}\right)^2} dx$$



$$L = \int_a^b \sqrt{1 + \left(\frac{dx}{dy}\right)^2} dy$$

Click to Save Answer & Move to Next Question



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

84

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 1 of 10 (Start time: 08:03:23 PM, 15 August 2021)

Total Marks: 1

The value of $\lim_{x \rightarrow 0} \frac{\ln \ln x}{\ln x} =$ _____

Select the correct option

Reload Math Equations



0



2



1



4

Click to Save Answer & Move to Next Question



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

89

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 4 of 10 (Start time: 08:08:22 PM, 15 August 2021)

Total Marks: 1

Arc length of the curve $y=x$ from $x=0$ to $x=2$ is ____.

Select the correct option

Reload Math Equations



$$\int_0^2 \sqrt{1 + |1|^2} dx$$



All of the above



$$\int_0^2 \sqrt{1 + \left| \frac{d}{dx}(x) \right|^2} dx$$



$$\int_0^2 \sqrt{1 + \left| \frac{dy}{dx} \right|^2} dx$$



Click to Save Answer & Move to Next Question



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

89

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 5 of 10 (Start time: 08:10:05 PM, 15 August 2021)

Total Marks: 1

The area bounded by the parabola $y^2 = x$, straight line $y = 4$ and y - axis is

Select the correct option

Reload Math Equations



$$\frac{64}{3}$$



$$7\sqrt{2}$$



None of these



$$\frac{16}{3}$$

Click to Save Answer & Move to Next Question



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left 88 sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 6 of 10 (Start time: 08:11:17 PM, 15 August 2021)

Total Marks: 1

Derivative of $f(x) = a - 7$, where a is a constant is....

Select the correct option

 -7  $a - 7$  a  0 [Click on Save Answer & Move to Next Question](#)



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

89

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 9 of 10 (Start time: 08:14:52 PM, 15 August 2021)

Total Marks: 1

Arc length of the curve $y=1$ from $x=0$ to $x=1$ is.....

Select the correct option

1



2



0



-1

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



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

88

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 8 of 10 (Start time: 08:13:10 PM, 15 August 2021)

Total Marks: 1

Use L'Hospital's rule to evaluate the $\lim_{x \rightarrow 0} \frac{\sin 2x}{x} =$ _____.

Select the correct option

Reload Math Equations



2



4



3



1

Click to Save Answer & Move to Next Question



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left 87 sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 7 of 10 (Start time: 08:12:08 PM, 15 August 2021)

Total Marks: 1

Sequence is the function whose _____ is the set of positive integers.

Select the correct option



Domain



Range



Click to Save Answer & Move to Next Question

Download More Quizzes Files From
VUAnswer.com



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

89

sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 10 of 10 (Start time: 08:15:39 PM, 15 August 2021)

Total Marks: 1

Length of the arc $y=c$ from $x=0$ to $x=1$ is ____.

Select the correct option



$$\int_0^1 \sqrt{1 + f\{(x)\}^2} \, dy$$



None of the above



1



0

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



Quiz

quiz.vu.edu.pk



BC190204339: MOMNA MUNAWAR

Time Left

59
sec(s)

MTH101:Quiz 3

Quiz Start Time: 08:03 PM, 15 August 2021

Question # 10 of 10 (Start time: 08:15:39 PM, 15 August 2021)

Total Marks: 1

Length of the arc $y=c$ from $x=0$ to $x=1$ is ____.

Select the correct option



$$\int_0^1 \sqrt{1 + f'(x)^2} \, dx$$



None of the above



1



0



Click on Save Answer & Move to next question