

Question # 1 of 10 (Start time: 09:42:01 AM, 06 June 2021)

Total Marks: 1

If the function is differentiable at a point then it is also _____ at that point.

Select the correct option

☒ Continuous*VU KMS**Whatsapp: 03066295623*☐ Not defined

Question # 2 of 10 (Start time: 09:42:41 AM, 06 June 2021)

Total Marks: 1

The derivative of function:
 $f(x) = -2(x-1) + \{5/(x-1)\}$ does not exist at
 $x = \text{-----}$

Select the correct option



-5



-1



1

VU KMS

Whatsapp: 03066295623



0

Question # 3 of 10 (Start time: 09:43:18 AM, 06 June 2021)

Total Marks: 1

If a truck travels 100 miles over a straight road in a 5-hour period, then the average velocity of the truck will be

Select the correct option



None of these



12 miles/hour



5 miles/hour



20 miles/hour

VU KMS

Whatsapp: 03066295623

Question # 4 of 10 (Start time: 09:43:54 AM, 06 June 2021)

The power rule for derivative says to _____ '1' from the exponent.

Select the correct option



Divide



Subtract

VU KMS

Whatsapp: 03066295623



Multiply



Add

Question # 5 of 10 (Start time: 09:44:19 AM, 06 June 2021)

Total Marks: 1

If $f(x) = 1/x$, then which of the following is true about it.

Select the correct option



None of these.



Its derivative with respect to x is $(-x^2)$.



Its derivative with respect to x is $(-1/x^2)$.



Its derivative with respect to x is $(1/x^2)$.

VU KMS

Whatsapp: 03066295623

Question # 6 of 10 (Start time: 09:44:38 AM, 06 June 2021)

Total Marks: 1

If $f(x) = \sqrt{x}$ and $g(x) = 4\sqrt{x}$, then the derivative of $f(x) \times g(x)$ is

Select the correct option

[Reload Math Equations](#)

4

VU KMS

Whatsapp: 03066295623

None of these

 x^2

-4

Saving...

Question # 7 of 10 (Start time: 09:45:02 AM, 06 June 2021)

Total Marks: 1

Velocity is the rate of change of position w.r.t

Select the correct option

time

VU KMS

Whatsapp: 03066295623



displacement



acceleration



force

Question # 8 of 10 (Start time: 09:45:29 AM, 06 June 2021)

Total Marks: 1

$$(f \cdot g)' = f' \cdot g + f \cdot g'$$

Select the correct option

True



False

VU KMS

Whatsapp: 03066295623

Question # 9 of 10 (Start time: 09:45:47 AM, 06 June 2021)

Total Marks: 1

Slope of secant line joining points (1,1) and (3,4) is ____.

Select the correct option

☒	1.5 VU KMS Whatsapp: 03066295623	/
☐	1	/
☐	None of these	/
☐	1.3	/

Question # 1 of 10 (Start time: 05:10:20 PM, 10 June 2021)

Total Marks: 1

Slope of the graph of the function: $f(x) = -4x+99$ at the point $(99,100)$ is ----

Select the correct option



99



-1



100



-4

VU KMS

Whatsapp: 03066295623

What is the derivative of $\cos(45)$?



Select the correct option



$-\sin(45)$



$\sec(45)$



$\sin(45)$



None of these

VU KMS

Whatsapp: 03066295623

Question # 3 of 10 (Start time: 05:12:11 PM, 10 June 2021)

Total Marks: 1

In the interval $[0, +2\pi]$, the minimum value of derivative of ' $f(x) = \sin x$ ' exists at $x = \text{----}$ (note: $\pi = 180$ degrees)

Select the correct option

 $\pi/2$ 

0

 $\pi/4$  π

VU KMS

Whatsapp: 03066295623

Question # 4 of 10 (Start time: 05:12:36 PM, 10 June 2021)

Total Marks: 1

If $f(t) = 8t - (5/t)$ then $f'(t) =$ _____

Select the correct option



$8t + (5/t^2)$



$8 + (5/t)$



$8 + (5/t^2)$



$8 - (5/t)$

VU KMS**Whatsapp: 03066295623**

Question # 5 of 10 (Start time: 05:13:02 PM, 10 June 2021)

Total Marks: 1

$g(x) = |x + 3|$ is the composition of two functions , one is $(x + 3)$ and the other is

Select the correct option

[Reload Math Equations](#)

0

 x **VU KMS** $|x|$ **Whatsapp: 03066295623**

3

Question # 6 of 10 (Start time: 05:13:22 PM, 10 June 2021)

Total Marks: 1

The power rule for derivative says to _____ '1' from the exponent.

Select the correct option



Divide



Add



Subtract



Multiply

VU KMS**Whatsapp: 03066295623**

Question # 7 of 10 (Start time: 05:13:44 PM, 10 June 2021)

Total Marks: 1

the derivative of $1/(x+1)$ is

Select the correct option



$-1/(x-1)$



$1/x$



$1/(x+1)$



$-1/(x+1) \cdot (x+1)$

VU KMS**Whatsapp: 03066295623**

Question # 8 of 10 (Start time: 05:14:03 PM, 10 June 2021)

Total Marks: 1

What is the derivative of

$$39x^{\frac{14}{13}}$$

Select the correct option

[Reload Math Equations](#)

$$24x^{\frac{1}{13}}$$



$$42x^{\frac{1}{13}}$$



None of these



$$42x$$

VU KMS**Whatsapp: 03066295623**

Question # 9 of 10 (Start time: 05:14:29 PM, 10 June 2021)

Total Marks: 1

Let a car moves from lower mall with the average velocity of 100 km/h and after covering the distance 50 km , the car reach at the airport Lahore. The time elapsed is

Select the correct option

☒	1/2	VU KMS Whatsapp: 03066295623	/
☐	2		/
☐	-1/2		/
☐	None of these		/

Question # 10 of 10 (Start time: 05:14:52 PM, 10 June 2021)

Total Marks: 1

If $f(x) = \sqrt{x}$ and $g(x) = 4\sqrt{x}$, then the derivative of $\frac{f(x)}{g(x)}$ is

Select the correct option

[Reload Math Equations](#)

2



4



None of these

 $x + 2$ **VU KMS****Whatsapp: 03066295623**

Question # 1 of 10 (Start time: 10:01:11 PM, 06 June 2021)

Total Marks: 1

If $f(x) = 5 \sin(x + 1)$ then its derivative by chain rule at $x = -1$ is

Select the correct option

[Reload Math Equations](#)

6



-1



1



5

VU KMS

Whatsapp: 03066295623

Question # 1 of 10 (Start time: 05:48:03 PM, 08 June 2021)

Total Marks: 1

If $f(x) = \cot^5(x^{20})$, then which of the following is true about it

Select the correct option

[Reload Math Equations](#)

VU KMS

whatsapp: 03066295623

Its derivative with respect to x is $-100x^{19} \cot^4(x^{20}) \operatorname{cosec}^2(x^{20})$

☐ None of these☐ Its derivative with respect to x is $x^{19} \cot^4(x^{20}) \operatorname{cosec}^2(x^{20})$ ☐ Its derivative with respect to x is $100x^{19} \cot^4(x^{20}) \operatorname{cosec}^2(x^{20})$

Question # 2 of 10 (Start time: 05:48:28 PM, 08 June 2021)

Total Marks: 1

If $(0,0)$ and $(2,2)$ are any two points on a curve then the slope of a line parallel to the secant segment through these points is _____.

Select the correct option



2



-1



1



-2

VU KMS**Whatsapp: 03066295623**

Question # 3 of 10 (Start time: 05:48:46 PM, 08 June 2021)

Total Marks: 1

If the slope of a function is zero, then which of the following is true about it.

Select the correct option



None of these.



The function should be a constant.



The function should be a linear.



The function should be a quadratic.

VU KMS

Whatsapp: 03066295623

Question # 4 of 10 (Start time: 05:49:04 PM, 08 June 2021)

Total Marks: 1

If $f(x) = \sin^4(x^2)$, then the derivative of $f(x)$ is _____.

Select the correct option

[Reload Math Equations](#)

VU KMS
Whatsapp: 03066295623

None of these.



$$8x \sin^3(x^2) \cos(x).$$



$$x \sin^3(x^2) \cos(x^2).$$



$$8x \sin^3(x^2).$$

Question # 5 of 10 (Start time: 05:49:25 PM, 08 June 2021)

Total Marks: 1

When the slope of the tangent line approaches to $\pm\infty$, then occurs

Select the correct option



circle



horizontal tangent



vertical tangents



corners

VU KMS

Whatsapp: 03066295623

Question # 6 of 10 (Start time: 05:49:44 PM, 08 June 2021)

Total Marks: 1

If $x = f(-3y)$ and $y = 2x$ then $\frac{df}{dx} = \dots\dots\dots$

Select the correct option

[Reload Math Equations](#)

-1/6



-6



-6



6

VU KMS**Whatsapp: 03066295623**

Question # 7 of 10 (Start time: 05:50:03 PM, 08 June 2021)

Total Marks: 1

On the straight line, the tangent at any point coincide with line -----

Select the correct option



some where



every where



none of these



no where

VU KMS

Whatsapp: 03066295623

Question # 8 of 10 (Start time: 05:50:19 PM, 08 June 2021)

Total Marks: 1

The derivative of the sum is equal to the of the derivatives

Select the correct option



Product



Quotient



Difference



Sum

VU KMS

Whatsapp: 03066295623

Question # 9 of 10 (Start time: 05:50:39 PM, 08 June 2021)

Total Marks: 1

If $f(x) = \cot(2x)$, then the derivative of $f(x)$ is

Select the correct option

[Reload Math Equations](#)

None of these.



VU KMS
Whatsapp: 03066295623

$$-2\csc^2(2x)$$



$$2\csc^2(2x)$$



$$-2\csc(2x)$$

Question # 10 of 10 (Start time: 05:50:57 PM, 08 June 2021)

Total Marks: 1

Derivative of a straight line parallel to y-axis is----

Select the correct option



Zero



-1



+1



Infinity

VU KMS

Whatsapp: 03066295623

Question # 2 of 10 (Start time: 10:01:37 PM, 06 June 2021)

Total Marks: 1

At a corner a tangent line does not exist because the slopes of the secant lines do not have a (two sided) limit.

Select the correct option

False



True

**VU KMS****Whatsapp: 03066295623**

Question # 3 of 10 (Start time: 10:01:54 PM, 06 June 2021)

Total Marks: 1

$$\frac{d}{dx}(-x \sin x) =$$

Select the correct option

[Reload Math Equations](#)☒ -xCosx-Sinx

VU KMS

Whatsapp: 03066295623

☐ -Sinx-Cosx☐ Sinx-xCosx☐ -xCosx+Sinx

Question # 1 of 10 (Start time: 06:20:37 PM, 06 June 2021)

Total Marks: 1

The derivative of $(x^2) + 2\sin x$ w. r. t x is



Select the correct option

[Reload Math Equations](#)

☒ $2x+2\cos x$

VU KMS**Whatsapp: 03066295623**

☐ $2x-2\cos x$

☐ $-2x-2\cos x$

☐ $-2x+2\sin x$

Question # 2 of 10 (Start time: 06:21:06 PM, 06 June 2021)

Total Marks: 1

Value of the derivative of ' $f(x) = \tan x$ ' at
 $x = \pi$, is -----
(note: $\pi = 180$ degrees)

Select the correct option



0

 $1/2$ 

-1



1

VU KMS

Whatsapp: 03066295623

Question # 3 of 10 (Start time: 06:21:30 PM, 06 June 2021)

Total Marks: 1

Derivative of a constant is zero.

Select the correct option

True

VU KMS**Whatsapp: 03066295623**

False

Question # 4 of 10 (Start time: 06:21:51 PM, 06 June 2021)

Total Marks: 1

If $f(x) = x^3 + 1$, then which of the following is NOT true about it.
NOTE - where x^n denotes the n th power of x .

Select the correct option

The slope of tangent line at $x = -2$ is 12.The slope of tangent line at $x = 2$ is 12.The slope of tangent line at $x = 1$ is 3.

None of these.

VU KMS

Whatsapp: 03066295623

Question # 5 of 10 (Start time: 06:22:13 PM, 06 June 2021)

Total Marks: 1

Average velocity is obtained by dividing the

Select the correct option

☒ Total distance by time elapsed

VU KMS

Whatsapp: 03066295623

☐ Total distance by velocity elapsed

Question # 6 of 10 (Start time: 06:22:33 PM, 06 June 2021)

Total Marks: 1

If $f(x) = 8x^2 - 2x + 5$, then $f'(0)$ will be.....

Select the correct option

4



-2



VU KMS

Whatsapp: 03066295623

-1



-3



Question # 7 of 10 (Start time: 06:22:54 PM, 06 June 2021)

Total Marks: 1

Derivative of a straight line parallel to y-axis is---

Select the correct option



-1



Zero



Infinity



+1

VU KMS

Whatsapp: 03066295623

Question # 8 of 10 (Start time: 06:23:13 PM, 06 June 2021)

Total Marks:

If a car travels 75 miles over a straight line in a 3-hour period, then we say that the average velocity of the car is.....miles per hour

Select the correct option



3.75



75



75/3



3/75

VU KMS

Whatsapp: 03066295623

Question # 9 of 10 (Start time: 06:23:34 PM, 06 June 2021)

Total Marks: 1

Derivative of function: $f(x) = \sin(x)$, exists-----

Select the correct option

- | | | | |
|----------------------------------|----------------|---|----|
| ☒ | everywhere - | <i>VU KMS</i>
<i>Whatsapp: 03066295623</i> | // |
| ☐ | only at origin | | // |
| ☐ | nowhere | | // |
| ☐ | somewhere | | // |

Question # 10 of 10 (Start time: 06:23:56 PM, 06 June 2021)

The equation of tangent line at the point P(2,3) to the curve $y = 3x^2$ having slope 12 is_____.

Select the correct option



$$y - 12x - 21 = 0$$



$$y - 12x + 21 = 0$$

VU KMS
Whatsapp: 03066295623



$$y + 12x + 21 = 0$$



None of these.

Question # 4 of 10 (Start time: 10:02:16 PM, 06 June 2021)

Total Marks: 1

Let $y = x^2 + 1$ Then the instantaneous rate of change of y with respect to x at the point -2 is

Select the correct option



0



-4



3



-1

VU KMS

Whatsapp: 03066295623

Question # 1 of 10 (Start time: 05:06:25 PM, 07 June 2021)

Total Marks: 1

If $f(x) = \cos^4(x^2)$, then the derivative of $f(x)$ is _____.

Select the correct option

[Reload Math Equations](#)**VU KMS****Whatsapp: 03066295623**

$$-8x \cos^3(x^2) \sin(x^2)$$

$$8x \cos^3(x^2) \sin(x^2).$$

None of these.

$$x \cos^3(x^2) \sin(x^2)$$

Question # 2 of 10 (Start time: 05:07:01 PM, 07 June 2021)

Total Marks: 1

On the straight line, the tangent at any point coincide with line -----

Select the correct option



every where

*VU KMS**Whatsapp: 03066295623*

no where



some where



none of these

Question # 3 of 10 (Start time: 05:07:47 PM, 07 June 2021)

Total Marks: 1

If $y = x^2$, then which of the following is true about it over the interval $[3, 4]$
NOTE- where x^n denotes the n th power of x .

Select the correct option

☒ Its average rate of change is 7.

VU KMS

Whatsapp: 03066295623

☐ Its average rate of change is 8.☐ None of these.☐ Its average rate of change is 9.

Question # 4 of 10 (Start time: 05:08:10 PM, 07 June 2021)

Total Marks: 1

If $f(x) = 1/x$, then which of the following is true about it.

Select the correct option



Its derivative with respect to x is $(1/x^2)$.



Its derivative with respect to x is $(-1/x^2)$.



Its derivative with respect to x is $(-x^2)$.



None of these.

VU KMS

Whatsapp: 03066295623

Question # 5 of 10 (Start time: 05:08:30 PM, 07 June 2021)

Total Marks: 1

If $f(x) = \sec x$ and $g(x) = \csc(x)$, then the derivative of $f(x) \times g(x)$ is

Select the correct option

[Reload Math Equations](#)

$$\sec x \csc x \cot x + \csc x \sec x \tan x$$



None of these.



VU KMS
Whatsapp: 03066295623

$$- \sec x \csc x \cot x + \csc x \sec x \tan x$$



$$- \sec x \csc x \cot x - \csc x \sec x \tan x$$

Question # 6 of 10 (Start time: 05:08:59 PM, 07 June 2021)

Total Marks: 1

The derivative of $y = \operatorname{Cosec} x$ at $x=0$ is

Select the correct option



1



-1



0



Infinity

VU KMS

Whatsapp: 03066295623

Question # 7 of 10 (Start time: 05:09:17 PM, 07 June 2021)

Total Marks: 1

Derivative of $(y + 1)$ w. r. t ' x ' is.....

Select the correct option

[Reload Math Equations](#)

VU KMS
Whatsapp: 03066295623

$$\frac{dy}{dx}$$

☐ Does not exist

☐ 1

$$\frac{dx}{dy}$$

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

Question # 8 of 10 (Start time: 05:09:43 PM, 07 June 2021)

Total Marks: 1

Derivative of x is 1

Select the correct option

☒ True**VU KMS****Whatsapp: 03066295623**☐ False

Question # 9 of 10 (Start time: 05:10:56 PM, 07 June 2021)

Total Marks: 1

If $f(x) = \tan^2(x^5)$, then the derivative of $f(x)$ is _____.

Select the correct option

[Reload Math Equations](#)

None of these.

**VU KMS****Whatsapp: 03066295623**

$$10x^4 \sec^2(x^5) \tan(x^5).$$



$$-10x^4 \sec^2(x^5) \tan(x^5).$$



$$x^4 \sec^2(x^5) \tan(x^5).$$

Question # 10 of 10 (Start time: 05:11:25 PM, 07 June 2021)

π radians corresponds to.....degrees

Select the correct option



75



360



180

VU KMS**Whatsapp: 03066295623**

90

Question # 5 of 10 (Start time: 10:02:40 PM, 06 June 2021)

Total Marks: 1

What is the derivative of $(3x^2 + 1)^{52}$?

Select the correct option

[Reload Math Equations](#)

$$(6x)^{52}$$

**VU KMS****Whatsapp: 03066295623**

$$312x(3x^2 + 1)^{51}$$



$$52(3x^2 + 1)^{51}$$

*None of these*

Question # 6 of 10 (Start time: 10:03:08 PM, 06 June 2021)

Total Marks: 1

If a function f is continuous at a point then it _____ be differentiable at that point.

Select the correct option



Is necessarily



May

VU KMS**Whatsapp: 03066295623**

Question # 7 of 10 (Start time: 10:03:27 PM, 06 June 2021)

Total Marks: 1

If $f(x) = x \cos(x)$, then which of the following is true about it?

Select the correct option

Its derivative with respect to x is
 $-x \sin(x) + \cos(x)$.

VU KMS

Whatsapp: 03066295623

Its derivative with respect to x is
 $-x \sin(x) + \sin(x)$.

None of these.

Its derivative with respect to x is
 $x \sin(x) + \cos(x)$.

Question # 8 of 10 (Start time: 10:03:47 PM, 06 June 2021)

Total Marks: 1

If $y=f(x)$ then instantaneous rate of change of y with respect to x at the point x_0 is given by slope of tangent line at $(x_0, f(x_0))$

Select the correct option

False



True

**VU KMS****Whatsapp: 03066295623**

Question # 9 of 10 (Start time: 10:04:04 PM, 06 June 2021)

Total Marks: 1

 x^0 where $x \neq 0$ is equal to

Select the correct option

[Reload Math Equations](#)

☒ **VU KMS**
Whatsapp: 03066295623

1

☐ None of these

☐ 0

☐ ∞



Question # 10 of 10 (Start time: 10:04:25 PM, 06 June 2021)

Total Marks: 1

If $y = x^2$, then which of the following is true about it over the interval $[3, 4]$
NOTE:- where x^n denotes the n th power of x .

Select the correct option

- | | | | |
|----------------------------------|----------------------------------|---|-----------------------|
| ☒ | Its average rate of change is 7. | VU KMS
Whatsapp: 03066295623 | ☐ |
| ☐ | Its average rate of change is 9. | | ☐ |
| ☐ | None of these. | | ☐ |
| ☐ | Its average rate of change is 8. | | ☐ |

Question # 1 of 10 (Start time: 08:31:09 AM, 06 June 2021)

Total Marks: 1

The derivative of x^3 is equal to..... ?

Select the correct option

[Reload Math Equations](#)

$3x^3$



VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

$3x^2$



x



1

Question # 2 of 10 (Start time: 08:31:35 AM, 06 June 2021)

Total Marks: 1

Derivative of absolute value function:

 $f(x) = \text{Abs}(x) = |x|$ at $x = -2$ is

Select the correct

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

-1



does not exist



zero



-2

Question # 3 of 10 (Start time: 08:32:06 AM, 06 June 2021)

Total Marks: 1

 $f(x) = \cos x$ is differentiable in the interval _____.

Select the correct option

 $(-\infty, 0]$  $(-\infty, +\infty)$  $[0, +\infty)$ 

All are true

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

Question # 4 of 10 (Start time: 08:32:27 AM, 06 June 2021)

Total Marks: 1

What is the derivative $\tan(x^2 + x^3)$?

Select the correct option

[Reload Math Equations](#)

$$(2x^3 + 3x) \sec^2(x^2 + x^3)$$



$$(2x^3 + 3x) \cos ec^2(x^2 + x^3)$$

**VU KMS****Grand Quizez k lia inbox kry****Whatsapp: 03066295623**

$$(3x^2 + 2x) \sec^2(x^2 + x^3)$$



None of these

Question # 5 of 10 (Start time: 08:33:08 AM, 06 June 2021)

Total Marks: 1

If $y = x^2$, then which of the following is true about it over the interval $[3, 4]$
NOTE:- where x^n denotes the n th power of x .

Select the correct option

- | | | |
|----------------------------------|----------------------------------|--|
| ☒ | Its average rate of change is 7. | VU KMS
Grand Quizez k lia inbox kry
Whatsapp: 03066295623 |
| ☐ | None of these. | |
| ☐ | Its average rate of change is 8. | |
| ☐ | Its average rate of change is 9. | |

Question # 6 of 10 (Start time: 08:33:33 AM, 06 June 2021)

Total Marks: 1

At $x = \pi$, the derivative of $f(x) = a \cos x - b \sin x$ is
(note : $\pi = 180\text{degrees}$)

Select the correct option

[Reload Math Equations](#)

-b



a



b

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623



-a

Question # 7 of 10 (Start time: 08:33:59 AM, 06 June 2021)

Total Marks: 1

If $f(x) = (x^2 + \sin(x) + \cos(x))^{10}$, then the derivative of $f(x)$ is _____.

Select the correct option

[Reload Math Equations](#)

$$10(x^2 + \sin(x) + \cos(x))^9$$



None of these.

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

$$10(x^2 + \sin(x) + \cos(x))^9(2x + \cos(x) - \sin(x))$$



$$10(x^2 + \sin(x) + \cos(x))^9(2x + \cos(x) + \sin(x)).$$

Question # 8 of 10 (Start time: 08:34:32 AM, 06 June 2021)

Total Marks: 1

Which of the following rule will be used to find the derivative of $x \cot x$?

Select the correct option

[Reload Math Equations](#)

☐	sum
☐	power
☒	product
☐	difference

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

Question # 9 of 10 (Start time: 08:35:02 AM, 06 June 2021)

Total Marks: 1

If $(0,0)$ and $(2,2)$ are any two points on a curve then the average speed of a particle passing through this curve from $(0,0)$ to $(2,2)$ is -----

Select the correct option



-1



2



-2



1

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

Question # 10 of 10 (Start time: 08:35:24 AM, 06 June 2021)

Simplified expression for $f(x)=\tan x/\sec x$ is

Select the correct option

☒ Sinx



VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

☐ Cosx



Question # 1 of 10 (Start time: 08:20:35 AM, 06 June 2021)

Total Marks: 1

For the curve: $f(t) = -2t+3$, the instantaneous rate of change of ' $f(t)$ ' at ' $t = a$ ' is _____.

Select the correct option



-1



-2

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623



1



2

Question # 2 of 10 (Start time: 08:21:05 AM, 06 June 2021)

Total Marks: 1

Slope of secant line joining points (1.1) and (3.4) is ____.

Select the correct option

1.5

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

1

1.3

None of these

Question # 3 of 10 (Start time: 08:22:27 AM, 06 June 2021)

Total Marks: 1

If $f(x) = \sec x$ and $g(x) = \csc(x)$, then the derivative of $f(x) \times g(x)$ is

Select the correct option

[Reload Math Equations](#)

$$- \sec x \csc x \cot x - \csc x \sec x \tan x$$



None of these.



$$- \sec x \csc x \cot x + \csc x \sec x \tan x$$



$$\sec x \csc x \cot x + \csc x \sec x \tan x$$

VU KMS

Grand Quizez k lia inbox

Whatsapp: 03066295623

Question # 4 of 10 (Start time: 08:23:18 AM, 06 June 2021)

Total Marks: 1

Derivative of a straight line parallel to x-axis is-----

Select the correct option



-1



Infinity



+1



Zero

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

Question # 5 of 10 (Start time: 08:23:57 AM, 06 June 2021)

Total Marks: 1

$$(f \cdot g)' = f' \cdot g - f \cdot g'$$

Select the correct option

True



False

**VU KMS****Grand Quizez k lia inbox kry****Whatsapp: 03066295623**

Question # 6 of 10 (Start time: 08:24:26 AM, 06 June 2021)

Total Marks: 1

The graph of function $y=2$ is a.....line with slope 0,is

Select the correct option

☒ Horizontal

VU-KMS
Grand Quizez k lia inbox kry
Whatsapp: 03066295623

☐ Vertical

Question # 7 of 10 (Start time: 08:25:16 AM, 06 June 2021)

Total Marks: 1

If $u(t) = 4 \cos t$, then $u'(\frac{\pi}{2}) = \dots$

Select the correct option

[Reload Math Equations](#)

2



9



-4



VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

4



Question # 8 of 10 (Start time: 08:26:00 AM, 06 June 2021)

Total Marks: 1

If $f(x) = x^5$ and $g(x) = x^2$, then the derivative of $\frac{f(x)}{g(x)}$ is

Select the correct option

[Reload Math Equations](#) $3x$ 

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

 $3x^2$ 

None of these

 $\frac{3}{4x^2}$

Question # 9 of 10 (Start time: 08:26:26 AM, 06 June 2021)

Total Marks: 1

What is the derivative of $\cot(x^6)$?

Select the correct option

[Reload Math Equations](#)

$$\cos ec(x^6) \cot(x^6)$$



None of these

**VU-KMS****Grand Quizez k lia inbox kry****Whatsapp: 03066295623**

$$-6x^5 \cos ec^2(x^6)$$



$$-\cos ec(x^6)$$

Question # 10 of 10 (Start time: 08:26:57 AM, 06 June 2021)

If $f(x) = x^5$ and $g(x) = x^2$, then the derivative of $f(x) \times g(x)$ is

Select the correct option



$6x^3$



$3x^2$



None of these

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623



$7x^2$

Question # 1 of 10 (Start time: 08:10:14 AM, 06 June 2021)

Total Marks: 1

What is the derivative of $\cos(2x)$ at $x = \pi/4$?

Select the correct option



0



None of these



-2

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623



2

Question # 2 of 10 (Start time: 08:11:02 AM, 06 June 2021)

Total Marks: 1

$$d(-2x+3\cos x)/dx=...$$

Select the correct option



$$2-3\sin x$$



$$-2-3\sin x$$



$$-2+3\sin x$$



$$2+3\sin x$$

VU KMS**Grand Quizez k lia inbox kry****Whatsapp: 03066295623**

Question # 3 of 10 (Start time: 08:11:43 AM, 06 June 2021)

Total Marks: 1

If $y = x^2$, then which of the following is true about it over the interval $[3, 4]$
NOTE:- where x^n denotes the n th power of x .

Select the correct option



None of these.



Its average rate of change is 9.



Its average rate of change is 7.



Its average rate of change is 8.

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

Question # 4 of 10 (Start time: 08:12:14 AM, 06 June 2021)

Total Marks: 1

If in the graph of $f(x)$, there comes a corner then the function is ----- at that corner.

Select the correct option

☐ Differentiable

☒ Non differentiable

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

Question # 5 of 10 (Start time: 08:12:46 AM, 06 June 2021)

Total Marks: 1

If $y = f(\sin t)$ and $y = t$ then $\left(\frac{df}{dy}\right) = \dots\dots\dots$

Select the correct option

[Reload Math Equations](#)**VU KMS****Grand Quizez k lia inbox kry****Whatsapp: 03066295623****sec y**

- sec y

cos y

- cos y

Question # 6 of 10 (Start time: 08:13:17 AM, 06 June 2021)

Total Marks: 1

Which of the followings is the derivative of $f(x) = 2\log x$?

Select the correct option

Reload Math Equations



$$f'(x) = \frac{2}{x^2}$$



$$f'(x) = \frac{1}{x \ln 2}$$



$$f'(x) = \frac{1}{\sqrt{x}}$$



VU KMS

Grand Quizzez k lia inbox kry

Whatsapp: 03066295623

$$f'(x) = \frac{2}{x}$$

Question # 7 of 10 (Start time: 08:14:01 AM, 06 June 2021)

Total Marks: 1

A bus travels 175 miles in 2.5 hours. Its average velocity will be.....

Select the correct option



80m/h



90m/h



70m/h

VU KMS**Grand Quizez k lia inbox kry****Whatsapp: 03066295623**

60m/h

Question # 8 of 10 (Start time: 08:14:38 AM, 06 June 2021)

Total Marks: 1

$f(x) = \tan x^2$ and $g(x) = \sin x^{10}$, then the derivative of $f(x) + g(x)$ is

Select the correct option

[Reload Math Equations](#)

$$\sec^2(x^2) + \cos x^{10}$$



$$2x \sec(x^2) + 10x^9 \cos x^{10}$$

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

$$2x \sec^2(x^2) + 10x^9 \cos x^{10}$$



None of these

Question # 9 of 10 (Start time: 08:15:36 AM, 06 June 2021)

Total Marks: 1

Derivative of $\sin(5x + 3)$ is

Select the correct option

[Reload Math Equations](#)

$$3 \cos(5x + 3)$$



$$3 \cos 5x$$



$$-5 \sin(5x + 3)$$

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623

$$5 \cos(5x + 3)$$

Question # 10 of 10 (Start time: 08:16:13 AM, 06 June 2021)

Secx is equal to the reciprocal of

Select the correct option



Cosecx



Tanx



Cosx

VU KMS

Grand Quizez k lia inbox kry

Whatsapp: 03066295623



Sinx