

After reversing the order of limits of $\int_0^1 \int_{2x}^1 e^{y^2} dy dx$, we get _____.

Select the correct option

[Reload Math Equations](#)

- | | | |
|----------------------------------|--|---|
| ☐ | $\int_0^1 \int_{1/2}^1 e^{y^2} dx dy$ | |
| ☒ | $\int_0^1 \int_0^{1/2} e^{y^2} dx dy$ |  |
| ☐ | $\int_0^1 \int_{1/2}^{2x} e^{y^2} dx dy$ | |
| ☐ | $\int_0^1 \int_{1/2}^0 e^{y^2} dx dy$ | |

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

Question 8 of 10 (Last time: 02:48:09 PM, 20 June 2022)

Choose for the double integral for the volume of a solid bounded above by $z = 8 - x - y$ and below by rectangle $0 \leq x \leq 4$, $0 \leq y \leq 8$.

Choose the correct option

☐ $V = \int_0^8 \int_0^4 (8 - x - y) dx dy$

☒ $V = \int_0^4 \int_0^8 (8 - x - y) dx dy$

☐ $V = \int_0^8 \int_0^4 (8 - x - y) dy dx$

☐ $V = \int_0^4 \int_0^8 (8 - x - y) dy dx$

Question # 4 of 10 (Start time: 03:29:15 PM, 29 June 2022)

If the value of the integral $\int_0^3 \int_0^1 (x+1) dy dx = 15/2$, then what will be the value of the integral $\int_0^1 \int_0^3 (x+1) dx dy$?

Select the correct option



0



15/2



-15/2



9/2

Click to Save Answer & Move

Question # 7 of 10 (Start time: 03:34:06 PM, 29 June 2022)

$$\int_0^1 \int_1^2 dx dy = \underline{\hspace{2cm}}.$$

Select the correct option

Reload Ma



0



2



3



1



Click to Show Answer & Move to Next Question

t time: 03:35:54 PM, 29 June 2022)

The equation of the line segment between the points $(0, -5)$ and $(4, 0)$ where slope is $5/4$ is

$$y = (5/4)x - 5$$



$$y = (-5/4)x + 5$$

$$y = (-5/4)x - 5$$

$$y = (5/4)x + 5$$

Time: 03:35:54 PM, 29 June 2022)

The equation of the line segment between the points $(0, -5)$ and $(4, 0)$ where slope is $5/4$ is

$$y = (5/4)x - 5$$

$$y = (-5/4)x + 5$$

$$y = (-5/4)x - 5$$

$$y = (5/4)x + 5$$

Click to Save Answer & Mark

Question # 3 of 10 (Start time: 04:01:43 PM, 29 June 2022)

Total Marks

If the value of the integral $\int_0^3 \int_0^1 (x+1) dy dx = 15/2$, then what will be the value of the integral $\int_0^1 \int_0^3 (x+1) dx dy$?

Select the correct option

[Reload Math Equation](#)

0



-15/2



15/2



9/2

[Click to Save Report & View all Questions](#)

Question # 3 of 10 (Start time: 04:01:43 PM, 29 June 2022)

Total Marks

If the value of the integral $\int_0^3 \int_0^1 (x+1) dy dx = 15/2$, then what will be the value of the integral $\int_0^1 \int_0^3 (x+1) dx dy$?

Select the correct option

[Reload Math Equation](#)

0



-15/2



15/2



9/2

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

Question # 3 of 10 (Start time: 04:01:43 PM, 29 June 2022)

Total Marks

If the value of the integral $\int_0^3 \int_0^1 (x+1) dy dx = 15/2$, then what will be the value of the integral $\int_0^1 \int_0^3 (x+1) dx dy$?

Select the correct option

[Reload Math Equation](#)

- | | |
|----------------------------------|-------|
| ☐ | 0 |
| ☐ | -15/2 |
| ☒ | 15/2 |
| ☐ | 9/2 |

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Reversing the order of integration $\int_0^1 \int_0^4 e^{-y^2} dy dx =$

Select the correct option

[Reload Math Equation](#)

- | | | |
|----------------------------------|--|--|
| ☐ | $\int_0^4 \int_0^{2y} e^{-y^2} dx dy$ | |
| ☒ | $\int_0^4 \int_0^{\frac{y}{2}} e^{-y^2} dx dy$ |  |
| ☐ | $\int_0^4 \int_0^{\frac{y}{2}} e^{-x^2} dx dy$ | |
| ☐ | $\int_0^4 \int_0^{2y} e^{-x^2} dx dy$ | |

Question # 9 of 10 (Start time: 03:57:13 PM, 29 June 2022)

Total M

$$\int_0^1 \int_1^2 dx dy = \underline{\hspace{2cm}}$$

Select the correct option

[Reload Math Equ](#)

- | | |
|-----------------------|---|
| ☐ | 1 |
| ☐ | 3 |
| ☐ | 0 |
| ☐ | 2 |
- 

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

If the region is bounded below and above by the horizontal lines $y = c$ and $y = d$ and is bounded on the left and right by the continuous curves, $x = h_1(y)$ and $x = h_2(y)$, satisfying $h_1(y) \leq h_2(y)$,

for $c \leq y \leq d$. Then $\iint_R f(x, y) dx dy =$ _____.

Select the correct option

 Reload Math Equations

☐

$$\int_c^d f(x, y) dx dy$$

☐

$$\int_{c=h_1(y)}^{d=h_2(y)} f(x, y) dx dy$$

☐

$$\int f(x, y) dy dx$$

☐

$$\int_{h_1(y)}^{h_2(y)} f(x, y) dx dy$$

3:48



75



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9



Quiz 15 (Start time: 06:47:00 PM, 27 June 2022)

If ----- on R , then $\iint_R f(x, y) dA \geq 0$.

Correct option

Reload Me

$$f(x, y) \geq 0$$



$$f(x, y) = 0$$

$$f(x, y) \leq 0$$

$$f(x, y) < 0$$

For each fixed x , $a \leq x \leq b$, the function $f(x, y)$ is a function of y alone,
 then $A(x)$ the area of this function on the interval $c \leq y \leq d$ then the volume is

$$V(S) = \int_a^b \left(\int_c^d f(x, y) dy \right) dx$$


$$V(S) = \int_a^b \left(\int_c^d f(x, y) dx \right) dy$$

$$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$$

$$V(S) = \int_c^d \left(\int_a^b f(x, y) dy \right) dx$$

$$\int_0^1 \int_0^{\ln y} x \, dy \, dx = \text{-----}$$

$$\frac{\ln x}{2}$$

$$\frac{\ln y}{2}$$



$$\frac{(\ln x)^2}{2}$$

$$\ln y$$

The equation of the line segment between the points $(0, -5)$ and $(4, 0)$ where slope is $5/4$ is

$$y = (5/4)x - 5$$



$$y = (5/4)x + 5$$

$$y = (-5/4)x - 5$$

$$y = (-5/4)x + 0$$

The critical point of the given function $f(x, y) = 4xy - 3x + 2y + 10$
where $f_x(x, y) = 4y - 3$ and $f_y(x, y) = 4x + 2$ is

$$\left(\frac{3}{4}, \frac{1}{2}\right)$$

$$\left(\frac{1}{2}, \frac{3}{4}\right)$$

$$\left(\frac{3}{4}, -\frac{1}{2}\right)$$

$$\left(-\frac{1}{2}, \frac{3}{4}\right)$$

Question 8 of 10 (Start time: 02:49:00 PM, 29 June 2022)

Use the double integral for the volume of a solid bounded above by $z = 8 - x - y$ and below by rectangle $0 \leq x \leq 4$, $0 \leq y \leq 8$.

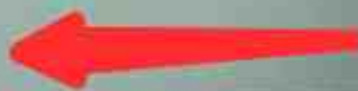
Which is the correct option?

☐ $V = \int_0^8 \int_0^4 (8 - x - y) dx dy$

☐ $V = \int_0^4 \int_0^8 (8 - x - y) dx dy$

☐ $V = \int_0^8 \int_0^4 (8 - x - y) dy dx$

☐ $V = \int_0^4 \int_0^8 (8 - x - y) dy dx$



Which of the following is a correct integral?

$$\iint_R f(x, y) dA = \int_c^d \int_{h_1(y)}^{h_2(y)} f(x, y) dx dy$$

$$\iint_R f(x, y) dA = \int_c^d \int_{h_1(x)}^{h_2(x)} f(x, y) dx dy$$


$$\iint_R f(x, y) dA = \int_{g_1(x)}^{g_2(x)} \int_{h_1(y)}^{h_2(y)} f(x, y) dy dx$$

$$\iint_R f(x, y) dA = \int_c^d \int_{h_1(y)}^{h_2(y)} f(x, y) dy dx$$

Reversing the order of integration $\int_0^1 \int_0^{1-x^2} e^{x^2} dx dy =$

$$\int_0^1 \int_0^{1-x^2} e^{x^2} dy dx$$

$$\int_0^1 \int_0^{1-x^2} e^{x^2} dy dx$$

$$\int_0^1 \int_0^{1-x^2} e^{x^2} dy dx$$

$$\int_0^1 \int_0^{1-x^2} e^{x^2} dy dx$$



After reversing the order of limits of $\int_0^3 \int_{x^2}^9 y \cos x \, dy \, dx$, we get --

$$\int_0^1 \int_0^{\sqrt{x}} y \cos x \, dx \, dy$$

$$\int_0^9 \int_0^{\sqrt{y}} y \cos x \, dx \, dy$$

$$\int_{x^2}^9 \int_0^3 y \cos x \, dx \, dy$$

$$\int_0^9 \int_0^{\sqrt{y}} y \cos x \, dy \, dx$$

$$\int_0^{10} (x^3 y + y^2) dz = \text{-----}$$

$$10 (x^3 y + y^2)$$

$$500y^2 + \frac{1000}{3}$$

$$10 \left(x^3 y^2 + \frac{y^3}{3} \right)$$

$$50x^3 + \frac{1000}{3}$$



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Question # 10 of 10 (Start time: 02:08:53 PM, 29 June 2022)

Total Marks: 1

If the region is bounded the left and right by vertical lines $x = a$ and $x = b$ and is bounded below and above by curves: $y = g_1(x)$ and $y = g_2(x)$, where $g_1(x) \leq g_2(x)$ for $a \leq x \leq b$. Then $\iint_R f(x, y) dA =$ _____.

Select the correct option.

[Reload Math Equations](#)☐

$$\int f(x, y) dy dx$$

☐

$$\int_a^b \int_{g_1(x)}^{g_2(x)} f(x, y) dy dx$$

☐

$$\int_{g_1(x)}^{g_2(x)} f(x, y) dy dx$$

☐

$$\int_a^b f(x, y) dx dy$$

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Question # 1 of 10 (Start time: 02:11:22 PM, 29 June 2022)

Total Marks: 1

$$\int_0^1 \int_0^{\ln y} x \, dy \, dx = \dots\dots\dots$$

Select the correct option

[Reload Math Equations](#)☐

$$\frac{(\ln x)^2}{2}$$

☐

$$\ln y$$

☐

$$\frac{\ln x}{2}$$

☐

$$\frac{\ln y}{2}$$

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

Question # 2 of 10 (Start time: 02:11:53 PM, 29 June 2022)

Total Marks: 1

The critical point of $f(x) = 2x^2$ is $x = \underline{\hspace{2cm}}$.

Select the correct option

[Reload Math Equations](#)

☐	2
☐	0
☐	1
☐	-1

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

The critical points of the given function $f(x) = x^3 + x^2 - x + 10$
where $f_x(x) = 3x^2 + 2x - 1$ are

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|------------------------|
| ☐ | $x = \frac{1}{3}, 1$ |
| ☐ | $x = \frac{1}{3}, -1$ |
| ☐ | $x = \frac{-1}{3}, -1$ |
| ☐ | $x = \frac{-1}{3}, 1$ |



Question # 4 of 10 (Start time: 02:13:20 PM, 29 June 2022)

Total Marks: 1

The absolute extrema of $f(x) = 2x$ is _____.

Select the correct option

[Reload Math Equations](#)

☐	$(0, 0)$
☐	$(0, 1)$
☐	$(0, -1)$
☐	None



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

Question # 5 of 10 (Start time: 02:13:44 PM, 29 June 2022)

Total Marks: 1

The $\int_0^1 2xe^{x^2} dx =$

Select the correct option

[Reload Math Equations](#)☐

$e + 1$

☐

e^{x^2}

☐

e

☐

$e - 1$

[Click To See Answer](#) [Click To Next Question](#)

Question # 6 of 10 (Start time: 02:22:52 PM, 29 June 2022)

Total Marks: 1

Expression for the double integral for the volume of a solid bounded above by $z=8-x-y$ and below by rectangle $R=0 \leq x \leq 4, 5 \leq y \leq 8$ is_____

Select the correct option

 Reload Math Equations



$$V = \int_5^8 \int_0^4 (8 - x - y) dy dx$$



$$V = \int_0^4 \int_5^8 (8 - x - y) dx dy$$



$$V = \int_5^8 \int_0^4 (8 - x - y) dx$$



$$V = \int_5^8 \int_0^4 (8 - x - y) dx dy$$

Question # 10 of 10 (Start time: 02:17:19 PM, 29 June 2022)

Total Marks: 1

The volume of a parallelopiped with dimensions x, y, z is

Select the correct option

[Reload Math Equations](#)

- ☐

$V = x + y + z$
- ☐

$V = x y z$
- ☐

$V = \sqrt{x y z}$
- ☐

$V = x^2 y^2 z^2$



Question # 5 of 10 (Start time: 01:55:46 PM, 29 June 2022)

Total Marks: 1

Reversing the order of integration $\int_0^1 \int_{4x}^4 e^{-y^2} dy dx =$

Select the correct option

[Reload Math Equations](#)☐

$$\int_0^4 \int_0^{\frac{x}{4}} e^{-y^2} dx dy$$

☐

$$\int_0^1 \int_0^{2y} e^{-x^2} dx dy$$

☐

$$\int_0^1 \int_0^{3y} e^{-x^2} dx dy$$

☐

$$\int_0^4 \int_0^{\frac{x}{4}} e^{-y^2} dx dy$$



Question # 6 of 10 (Start time: 01:56:51 PM, 29 June 2022)

Total Marks: 1

After reversing the order of limits of $\int_0^1 \int_{2x}^{\frac{1}{2}} e^{y^2} dy dx$, we get _____.

Select the correct option

[Reload Math Equations](#)☐

$$\int_0^1 \int_{-\frac{1}{2}}^0 e^{y^2} dx dy$$

☐

$$\int_0^1 \int_{-\frac{1}{2}}^{2x} e^{y^2} dx dy$$

☐

$$\int_0^1 \int_{2x}^{\frac{1}{2}} e^{y^2} dx dy$$

☐

$$\int_0^1 \int_0^{\frac{1}{2}} e^{y^2} dx dy$$

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

Question # 7 of 10 (Start time: 01:57:46 PM, 29 June 2022)

Total Marks: 1

$$\int_0^{\ln 3} \int_0^{\ln 5} e^{u+v} du dv = \dots\dots\dots$$

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|----|
| ☐ | 15 |
| ☐ | 8 |
| ☐ | 5 |
| ☐ | 3 |



Question # 8 of 10 (Start time: 01:58:23 PM, 29 June 2022)

Total Marks: 1

Let x be the length, width and height of a rectangular box. The area of its roof will be

Select the correct option

[Reload Math Equations](#)

- | | |
|----------------------------------|-----------------|
| ☐ | $A = x$ |
| ☐ | $A = 2x$ |
| ☒ | $A = x^2$ |
| ☐ | $A = x + x + x$ |

[View Question History \(0/0\)](#)

Question # 9 of 10 (Start time: 01:58:57 PM, 29 June 2022)

Total Marks: 1

The expression $\int_a^b f(x, y) dx$ is a function of ____

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|---------------|
| ☐ | x |
| ☐ | y |
| ☐ | None of these |
| ☐ | both x and y |



For each fixed x ; $a \leq x \leq b$, the function $f(x, y)$ is a function of y alone, then the area of this function on the interval $c \leq y \leq d$ is

Select the correct option

[Reveal Math Equations](#)



$$A(x) = \int_a^b f(x, y) dx$$



$$A(x) = \int_c^d f(x, y) dy$$



$$A(x) = \int_a^b f(x, y) dy$$



$$A(x) = \int_c^d f(x, y) dx$$

Which of the following is a correct integral?

[Reload Math Equ](#)

$$\iint_R f(x, y) dA = \int_c^d \int_{h_1(y)}^{h_2(y)} f(x, y) dy dx$$

$$\iint_R f(x, y) dA = \int_c^d \int_{h_1(x)}^{h_2(x)} f(x, y) dx dy$$



$$\iint_R f(x, y) dA = \int_{g_1(x)}^{g_2(x)} \int_{h_1(y)}^{h_2(y)} f(x, y) dy dx$$

$$\iint_R f(x, y) dA = \int_c^d \int_{h_1(y)}^{h_2(y)} f(x, y) dx dy$$

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



Solution



$$\int_0^1 2x e^{x^2} dx$$



Solution

Show Steps

$$\int_0^1 2x e^{x^2} dx = e - 1 \quad (\text{Decimal: } 1.71828\dots)$$

Steps

$$\int_0^1 2x e^{x^2} dx$$

Take the constant out: $\int a \cdot f(x) dx = a \cdot \int f(x) dx$

$$= 2 \cdot \int_0^1 x e^{x^2} dx$$

Apply u - substitution

Show Steps

$$= 2 \cdot \int_0^1 \frac{e^u}{2} du$$

Take the constant out: $\int a \cdot f(x) dx = a \cdot \int f(x) dx$

$$= 2 \cdot \frac{1}{2} \cdot \int_0^1 e^u du$$

Use the common integral: $\int e^u du = e^u$

$$= 2 \cdot \frac{1}{2} [e^u]_0^1$$

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COOL OMOJI and LOVE OMOJI



i X

Let x , y , z be the length, width and height of a rectangular box respectively. The area of bottom will be

Select the correct option

[Reload Math Equation](#)



$$A = yz$$



$$A = xyz$$



$$A = xy$$



$$A = xz$$

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

Question # 3 of 10 (Start time: 02:02:23 PM, 29 June 2022)

Total Marks: 1

$$\int_0^{\ln 6} \int_0^{\ln 3} f(x, y) \, dx \, dy = \int_0^{\ln 3} \int_0^{\ln 6} f(x, y) \, dy \, dx$$

Select the correct option

[Reload Math Equations](#)

True



False

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



Solution



$$\int_0^1 \int_0^{\ln y} x \, dy \, dx$$



Solving $\int_0^1 \int_0^{\ln(y)} x \, dx \, dy$

Solution

Show Steps

$$\int_0^1 \int_0^{\ln(y)} x \, dx \, dy = 1$$

Steps

$$\int_0^1 \int_0^{\ln(y)} x \, dx \, dy$$

$$\int_0^{\ln(y)} x \, dx = \frac{\ln^2(y)}{2}$$

Show Steps

$$= \int_0^1 \left(\frac{\ln^2(y)}{2} \right) dy$$

$$\int_0^1 \left(\frac{\ln^2(y)}{2} \right) dy = 1$$

Show Steps

$$= 1$$

Got a different answer? Check if it's correct

Enter your answer



Question # 4 of 10 (Start time: 02:02:58 PM, 29 June 2022)

Total Marks: 1

After reversing the order of limits of $\int_0^3 \int_{x^2}^9 y \cos x \, dy \, dx$, we get -----

Select the correct option

[Reload Math Equations](#)☐

$$\int_0^9 \int_0^{\sqrt{y}} y \cos x \, dx \, dy$$

☐

$$\int_0^9 \int_0^{\sqrt{y}} y \cos x \, dy \, dx$$

☐

$$\int_0^3 \int_0^{\sqrt{x}} y \cos x \, dx \, dy$$

☐

$$\int_{x^2}^9 \int_0^3 y \cos x \, dx \, dy$$

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

After reversing the order of limits of $\int_0^1 \int_{2x}^1 e^{y^2} dy dx$, we get _____.

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|--|
| ☐ | $\int_0^1 \int_{2x}^1 e^{y^2} dx dy$ |
| ☐ | $\int_0^1 \int_{\frac{1}{2}}^{2x} e^{y^2} dx dy$ |
| ☐ | $\int_0^1 \int_0^{\frac{x}{2}} e^{y^2} dx dy$ |
| ☐ | $\int_0^1 \int_{\frac{x}{2}}^0 e^{y^2} dx dy$ |



For each fixed x ; $a \leq x \leq b$, the function $f(x, y)$ is a function of y alone,
then $A(x)$ the area of this function on the interval $c \leq y \leq d$ then the volume is

Select the correct option.

[Reload Math Equations](#)

☐	$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$
☐	$V(S) = \int_a^b \left(\int_c^d f(x, y) dx \right) dy$
☐	$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$
☐	$V(S) = \int_a^b \left(\int_c^d f(x, y) dy \right) dx$



[Check Answer / Review All Questions / Next Question](#)

The critical points of the given function $f(x) = x^3 + x^2 - x + 10$
where $f_x(x) = 3x^2 + 2x - 1$ are

Select the correct option

[Reload Math Equations](#)

- | | |
|-----------------------|------------------------|
| ☐ | $x = \frac{1}{3}, 1$ |
| ☐ | $x = \frac{-1}{3}, 1$ |
| ☐ | $x = \frac{-1}{3}, -1$ |
| ☐ | $x = \frac{1}{3}, -1$ |



[Check Answer / Answer & Marking / Next Question](#)

Let x be the length, width and height of a rectangular box. The area of its roof will be

Select the correct option

[Related Math Equations](#)



$$A = x + x + x$$



$$A = x$$



$$A = x^2$$



$$A = 2x$$

[Check for updates](#)

The order of integration in the iterated integral does not matter.

Select the correct option

- ☐ False
- ☒ True



$$\int_0^2 \int_0^4 10 \, dx \, dy = \text{-----}$$

Select the correct option



80



20



60



40

Click to Save Answer & Move

The integral to find the volume under the surface $z = 5x^3 + 5x^2y$ and the rectangle $\{(x, y) : 0 \leq x \leq 3, 0 \leq y \leq 2\}$ is -----

Select the correct option

[Reload Math Equations](#)

☐

$$\int_0^2 \int_0^3 (5x^3 + 5x^2y) \, dx \, dy$$


☐

$$\int_0^3 \int_0^2 (5x^3 + 5x^2y) \, dx \, dy$$

☐

$$\int_0^3 \int_0^2 (5x^3 + 5x^2y) \, dy \, dx$$

☐

$$\int_0^2 \int_0^3 (5x^3 + 5x^2y) \, dy \, dx$$

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Question # 4 of 10 (Start time: 01:45:33 PM, 29 June 2022)

$$\int_0^1 \int_0^1 dx dy = \underline{\hspace{2cm}}.$$

Select the correct option



3



0



1



2

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For each fixed $y, c \leq y \leq d$, the function $f(x, y)$ is a function of x alone, then the area of this function on the interval $a \leq x \leq b$ is

Select the correct option

[Reveal Math Equation](#)☐

$$A(y) = \int_c^d f(x, y) dy$$

☐

$$A(y) = \int_a^b f(x, y) dy$$

☒

$$A(y) = \int_a^b f(x, y) dx$$

☐

$$A(y) = \int_c^d f(x, y) dx$$

The critical point(s) of $f(x) = 3x - 2$ is(are) $x =$ _____.

Select the correct option



$0, -1$



$0, 0$



None



$0, 1$

Click to Save

After reversing the order of limits of $\int_0^2 \int_x^2 f(x, y) dy dx$, we get — — — — —

Select the correct option

 Refresh Math Equations

☐

$$\int_0^2 \int_x^2 f(x, y) dx dy$$

☐

$$\int_0^2 \int_0^y f(x, y) dx dy$$



☐

$$\int_x^2 \int_0^y f(x, y) dy dx$$

☐

$$\int_0^2 \int_x^2 f(x, y) dx dy$$

Click on Save Answer & Move to Next Question

The expression $\int_a^b f(x, y) dy$ is a function of

Select the correct option

☐	None of these
☐	y
☐	Both x and y
☐	x



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Question # 7 of 10 (Start time: 01:48:44 PM, 29 June 2022)

For each fixed $x; a \leq x \leq b$, the function $f(x, y)$ is a function of y alone,
then $A(x)$ the area of this function on the interval $c \leq y \leq d$ then the volume is

Select the correct option

- ☐
- $$V(S) = \int_a^b \left(\int_c^d f(x, y) dy \right) dx$$
- ☐
- $$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$$
- ☒
- $$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$$
- ☐
- $$V(S) = \int_a^b \left(\int_c^d f(x, y) dx \right) dy$$

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The critical points of the given function $f(x) = x^3 + x^2 - x + 10$
where $f'(x) = 3x^2 + 2x - 1$ are _____.

Select the correct option

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$$x = \frac{1}{3}, 1$$



$$x = \frac{1}{3}, -1$$



$$x = \frac{-1}{3}, -1$$



$$x = \frac{-1}{3}, 1$$

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Question # 9 of 10 (Start time: 01:51:17 PM, 29 June 2022)

Total M

For each fixed $y; c \leq y \leq d$, the function $f(x, y)$ is a function of x alone,
then $A(y)$ the area of this function on the interval $a \leq x \leq b$ then the volume is

$$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$$

Select the correct option

Reload Math Eq

☒


$$V(S) = \int_a^b \left(\int_c^d f(x, y) dx \right) dy$$

☐

$$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$$

☐

$$V(S) = \int_a^b \left(\int_c^d f(x, y) dy \right) dx$$

☐

$$V(S) = \int_c^d \left(\int_a^b f(x, y) dx \right) dy$$

X,Y,Z are three positive numbers whose sum is 27 and such that the sum of their squares is as small as possible, find the numbers.

Select the correct option

- ☐ X=12, Y=6, Z=9
- ☐ X=9, Y=12, Z=6
- ☒ X=9, Y=9, Z=9
- ☐ X=3, Y=9, Z=15

If $f(x, y) \geq 0$ on R , then $\iint_R f(x, y) \, dA \geq 0$.

Select the correct option

- | | |
|----------------------------------|------------------|
| ☐ | $f(x, y) = 0$ |
| ☒ | $f(x, y) \geq 0$ |
| ☐ | $f(x, y) \leq 0$ |
| ☐ | $f(x, y) < 0$ |

10 of 10 (Start time: 01:53:11 PM, 29 June 2022)

The double integral of two variables x and y over the certain region R of the xy -plane can be expressed as _____.

correct option



$$\iint_R f(x, y) \, dx \, dy$$

$$\int_R f(x, y) \, dx \, dy$$

$$\iint_R f(x, y) \, dy$$

$$\iint_R f(x, y) \, dx$$