

Status Finished**Started** Wednesday, 8 July 2026, 1:37 AM**Completed** Wednesday, 8 July 2026, 1:37 AM**Duration** 8 secs**Grade** 0.00 out of 11.00 (0%)**Question 1**

Not answered

Marked out of 1.00

v1 (latest)

The variable m varies jointly with x^2 and y . If $m = -1$ when $x = 3$ and $y = 5$, what is the positive value of x when $y = 8$ and $m = -\frac{1}{10}$?

- ☐ a. $\frac{3}{4}$
- ☐ b. $\frac{3}{2}$
- ☐ c. $\frac{9}{16}$
- ☐ d. 2
- ☐ e. 4

Step 1: Set up the joint variation equation

Joint variation means the relationship can be written as:

$$m = k \cdot x^2 \cdot y$$

where k is the constant of variation.

Step 2: Find the value of k

Substitute the initial values $x = 3$, $y = 5$, and $m = -1$ into the equation:

$$-1 = k \cdot (3)^2 \cdot 5$$

$$-1 = k \cdot 9 \cdot 5$$

$$-1 = 45k$$

$$k = -\frac{1}{45}$$

Step 3: Solve for x using the updated values

Substitute $k = -\frac{1}{45}$, $y = 8$, and $m = -\frac{1}{10}$ into the formula:

$$-\frac{1}{10} = -\frac{1}{45} \cdot x^2 \cdot 8$$

Multiply both sides by -45 to isolate the x^2 terms:

$$-45 \cdot \left(-\frac{1}{10}\right) = 8x^2$$

$$\frac{45}{10} = 8x^2$$

$$\frac{9}{2} = 8x^2$$

Divide both sides by 8:

$$x^2 = \frac{9}{16}$$

Take the square root of both sides to find the positive value of x :

$$x = \frac{3}{4}$$

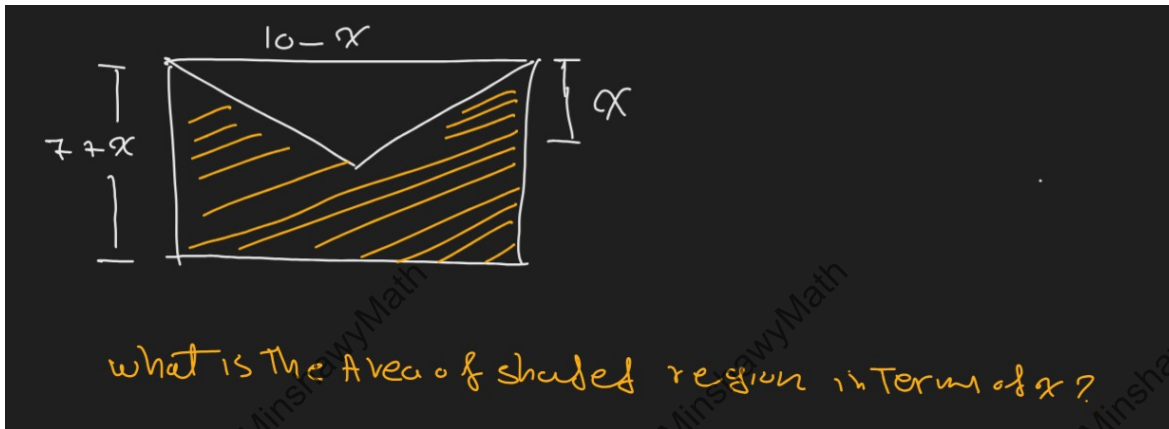
The correct answer is: $\frac{3}{4}$

Question 2

Not answered

Marked out of 1.00

v1 (latest)



Answer:

✗

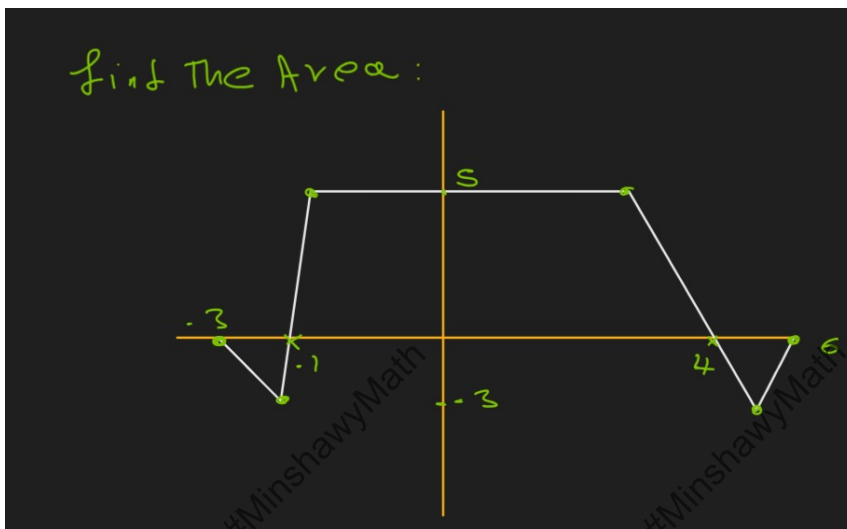
The correct answer is: 12

Question 3

Not answered

Marked out of 1.00

v1 (latest)



Answer:

✗

The correct answer is: 12

Question 4

Not answered

Marked out of 1.00

v1 (latest)

If $2a + x = 8$, $7x - y = -17$, and $a + 2y = 11$, what is the value of $a + x + y$?

- A) 4
- B) 6
- C) 8
- D) 10

- ☐ a. a
- ☐ b. b
- ☐ c. c
- ☐ d. d

Your answer is incorrect.

The correct answer is: b

Question 5

Not answered

Marked out of 1.00

v2 (latest)

Suppose m varies jointly with x^2 and y . If $m = -1$ when $x = 3$ and $y = 5$, find the value of m when $x = 6$ and $y = 10$.

- ☐ a. A) -2
- ☐ b. B) -4
- ☐ c. C) -8
- ☐ d. D) -12

Your answer is incorrect.

The correct answer is: C) -8

Question 6

Not answered

Marked out of 1.00

v1 (latest)

If a car is moving at 80 kph, how many seconds will it need to cover 220 kilometers

- ☐ a. 9900
- ☐ b. 8800
- ☐ c. 7700
- ☐ d. 6600

Your answer is incorrect.

The correct answer is: 9900

Question 7

Not answered

Marked out of 1.00

v2 (latest)

The data set below shows a list of numbers:

3, 3, 5, 8, 12, 19, 20, 22, 30, 33, 39, 40, 40, 42

If m represents the largest mode of the data set and n represents the median, find the value of nm .

- ☐ a. 63
- ☐ b. 420
- ☐ c. 441
- ☐ d. 474

Your answer is incorrect.

The correct answer is: 474

Question 8

Not answered

Marked out of 1.00

v1 (latest)

A customer purchases a high-end laptop using a 24-month installment plan. The total amount paid, y , in dollars, can be modeled by the equation $y = 240 + 24x$, where x represents the dollar amount of each monthly installment payment. What is the best interpretation of the number 240 in this context?

- ☐ a. A) The number of months the installment plan lasts.
- ☐ b. B) The total cost of the laptop after all payments are completed.
- ☐ c. C) The initial down payment or beginning cost before monthly installments begin.
- ☐ d. D) The value of each monthly payment.

Your answer is incorrect.

The correct answer is: C) The initial down payment or beginning cost before monthly installments begin.

Question 9

Not answered

Marked out of 1.00

v1 (latest)

Line l passes through the points $(2, -3)$ and $(6, k)$ in the xy -plane. If the slope of line l is $\frac{5}{2}$, what is the value of k ?

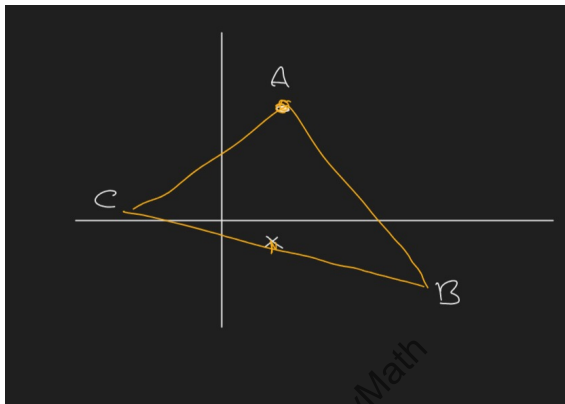
- ☐ a. A) 2
- ☐ b. B) 5
- ☐ c. C) 7
- ☐ d. D) 10

Your answer is incorrect.

The correct answer is: C) 7

Information

v1 (latest)



Question 10

Not answered

Marked out of 1.00

v1 (latest)

In the coordinate plane shown above, a triangle has vertices A , B , and C . The vertex A is located at $(1, 3)$ and the midpoint of the opposite side BC is located at $(1, -1)$. What are the coordinates of the centroid of triangle ABC ?

- ☐ a. $(1, \frac{1}{3})$
- ☐ b. $(1, 1)$
- ☐ c. $(1, \frac{2}{3})$
- ☐ d. $(1, 0)$

Your answer is incorrect.

The correct answer is: $(1, \frac{1}{3})$

Question 11

Not answered

Marked out of 1.00

v1 (latest)

In the coordinate plane shown above, a triangle has vertices A , B , and C . A median line is drawn from vertex A to the opposite side BC . If the coordinates of vertex A are $(1, 3)$ and the midpoint of side BC is located at $(1, -1)$, what is the equation of this median line?

- ☐ a. $x = 1$
- ☐ b. $x = 5$
- ☐ c. $y = 1$
- ☐ d. $y = x^2$

Your answer is incorrect.

The correct answer is: $x = 1$