DSAT May 2025

Math Questions

Eng. Mohamed Elminshawy

#Minshawy_Math WhatsApp: +201144304897

Module 1

Started on	Tuesday, 3 June 2025, 11:05 PM
State	Finished
Completed on	Tuesday, 3 June 2025, 11:06 PM
Time taken	16 secs
Grade	**0.00** out of 21.00 (**0**%)

Question 1

Not answered

Marked out of 1.00

v2 (latest)

The function f is defined by $fx = 85x + 30$. *What is the value of* fx *when* $x = 6$?

Answer:

The correct answer is: 540

Question 2

Not answered

Marked out of 1.00

v2 (latest)

In triangle XYZ, two of the angles have the same measure. If the measure of angle X is $138°$ *and the measure of angle Y is* $21°$, *what is the measure of angle Z?*

a. 180

b. 138

c. 42

d. 21

Your answer is incorrect.

The correct answer is: 21

Question 3

Not answered

Marked out of 1.00

v2 (latest)

$$x^2 - 8 = 28$$

What is the positive solution to the given equation?

a. 20

b. $\sqrt{20}$

c. 36

d. $\sqrt{36}$

Your answer is incorrect.

The correct answer is: $\sqrt{36}$

Question 4

Not answered

Marked out of 1.00

v2 (latest)

What value of x is the solution to the equation $16x + 60 = 28x$?

a. -4

b. $\frac{1}{5}$

c. $\frac{5}{11}$

d. 5

Your answer is incorrect.

The correct answer is: 5

Question 5

Not answered

Marked out of 1.00

v3 (latest)

Which expression is equivalent to $70y + 60y$*?*

A.

$420y^2$

B.

$420y$

C.

$130y^2$

D.

$130y$

a. A

b. B

c. C

d. D

Your answer is incorrect.

The correct answer is: D

Question 6

Not answered

Marked out of 1.00

v2 (latest)

An internet provider wanted to know how many of its 20,000 subscribers would be interested in a new service plan. The provider selected 200 subscribers at random and asked each subscriber whether the subscriber would be interested in the new plan. Of those surveyed, 3 said they would be interested. Which of the following is the best estimate of the total number of subscribers who would be interested in the new service plan?

a. 3

b. 30

c. 300

d. 3000

Your answer is incorrect.

The correct answer is: 300

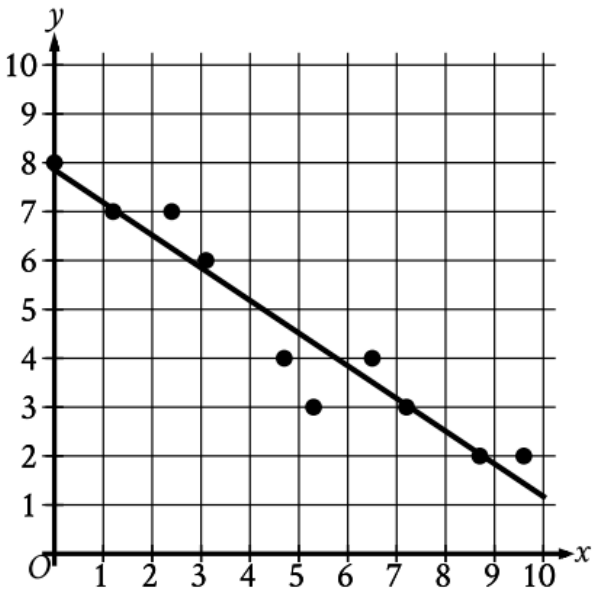
Question 7

Not answered

Marked out of 1.00

v2 (latest)

In the given scatterplot, a line of best fit for the data is shown.



Which of the following is closest to the slope of this line of best fit?

a. -7

b. -0.7

c. 0.7

d. 7

Your answer is incorrect.

The correct answer is: -0.7

Question 8

Not answered

Marked out of 1.00

v2 (latest)

A chemist mixed x liters of a 4% saline solution with y liters of a 7% saline solution to produce a 5% saline solution. Which equation best represents this situation? (Assume the volumes of the solutions are additive.)

a. $0.04x + 0.07y = 5(x + y)$

b. $0.04x + 0.07y = 0.05(x + y)$

c. $0.4x + 0.7y = 5(x + y)$

d. $0.4x + 0.7y = 0.5(x + y)$

Your answer is incorrect.

The correct answer is: $0.04x + 0.07y = 0.05(x + y)$

Question 10

Not answered

Marked out of 1.00

v3 (latest)

A car dealership has only sedans, SUVs, and minivans for sale. On Monday, 20% of the vehicles for sale were sedans and 50% were SUVs. If there were 36 sedans for sale at the dealership on Monday, how many minivans were for sale?

Answer: ×

The correct answer is: 54

Question 11

Not answered

Marked out of 1.00

v4 (latest)

Each face of a fair 16-sided die is labeled with a number from 1 through 16, with a different number appearing on each face. If the die is rolled one time, what is the probability of rolling a 4? (Express your answer as a decimal or fraction, not as a percent.)

Answer: ✕

The correct answer is: 0.0625

Question 12

Not answered

Marked out of 1.00

v2 (latest)

The base of a parallelogram has a length of x meters, and the height of the parallelogram is x−8 meters. The parallelogram has an area of 308 square meters. What is the value of x?

a. 28

b. 22

c. 14

d. 11

Your answer is incorrect.

The correct answer is: 22

Question 13

Not answered

Marked out of 1.00

v2 (latest)

x	y
1	21
2	33
3	a

The table shows three values of x and their corresponding values of y for the equation $y = 62^x + 9$. In the table, a is a constant. What is the value of a?

a. 105

b. 57

c. 48

d. 45

Your answer is incorrect.

The correct answer is: 57

Question 14

Not answered

Marked out of 1.00

v2 (latest)

A right square pyramid has a base with side lengths of 6 centimeters. The height of the pyramid is 10 centimeters. What is the volume, in cubic centimeters, of this pyramid?

a. 20

b. 40

c. 120

d. 360

Your answer is incorrect.

The correct answer is: 120

Question 15

Not answered

Marked out of 1.00

v3 (latest)

$$y = x + 9$$

$$y = x^2 + 16x + 63$$

A solution to the given system of equations is a, b, where a and b are constants. What is the greatest possible value of a?

Answer: ✕

The correct answer is: -6

Question 16

Not answered

Marked out of 1.00

v4 (latest)

Circle A in the xy-plane has the equation$(x + 3)^2 + (y - 3)^2 = 4$. Circle B has the same center as circle A. The radius of circle B is two times the radius of circle A. The equation defining circle B in the xy-plane is $(x + 3)^2 + (y - 3)^2 = k$, where k is a constant. What is the value of k?

Answer: ✕

The correct answer is: 16

Question 17

Not answered

Marked out of 1.00

v3 (latest)

In the xy-plane, line k has a slope of $\frac{6}{17}$, an x-intercept of -6, 0, and a y-intercept of 0, p. What is the value of p?

Answer: ✕

The correct answer is: 2.1176

Question 18

Not answered

Marked out of 1.00

v3 (latest)

Which expression is a factor of $20y^3 + 15py^2 + 28y + 21p$*?*

a. $5y^2 + 7$

b. $5y^2 + 7p$

c. $4y + 3$

d. $3y + 4p$

Your answer is incorrect.

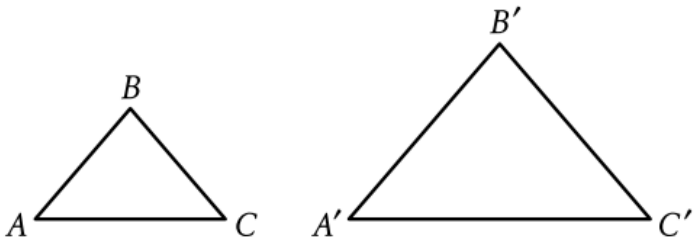
The correct answer is: $5y^2 + 7$

Question 19

Not answered

Marked out of 1.00

v2 (latest)



Note: Figures not drawn to scale.

- *The 2 triangles are oriented such that vertex upper A corresponds to vertex upper A prime, vertex upper B corresponds to vertex upper B prime, and vertex upper C corresponds to vertex upper C prime.*
- *A note indicates the figures are not drawn to scale.*

Triangles ABC and $A'B'C'$ are shown. Triangle ABC is dilated by a scale factor of 4 to form triangle $A'B'C'$. If the length of $\overline{AB}$ is 48, what is the length of $\overline{A'B'}$?

a. 4

b. 12

c. 52

d. 192

Your answer is incorrect.

The correct answer is: 12

Question 20

Not answered

Marked out of 1.00

v2 (latest)

An object is launched into the air from ground level. According to a quadratic model, 3.9 seconds after the object is launched, it reaches its maximum height of 243.36 feet above ground level. Which equation represents this model, where $f(t)$ is the object's height, in feet, above ground level t seconds after it was launched?

a. $ft = -16(t - 3.9)^2 + 243.36$

b. $ft = 16(t - 3.9)^2 + 243.36$

c. $ft = -16(t + 3.9)^2 + 243.36$

d. $ft = 16(t + 3.9)^2 + 243.36$

Your answer is incorrect.

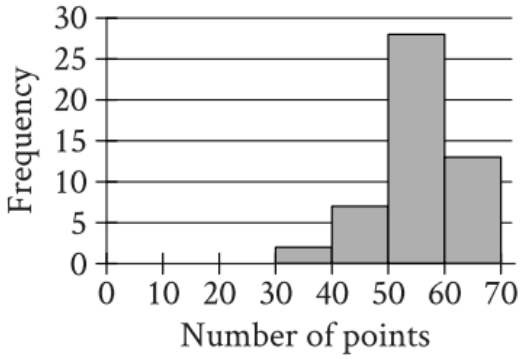
The correct answer is: $ft = -16(t - 3.9)^2 + 243.36$

Question 21

Not answered

Marked out of 1.00

v2 (latest)



- *The histogram has 4 bins.*
- *The frequency values of the 4 bins are as follows:*
  - *30 to 39 points: About halfway between 0 and 5*
  - *40 to 49 points: About halfway between 5 and 10*
  - *50 to 59 points: About halfway between 25 and 30*
  - *60 to 69 points: About halfway between 10 and 15*

The histogram summarizes the distribution of an original data set that represents the number of points per game a basketball team has scored in the last 50 *games played. If the team scores* 18 *points in the next game and this game is added to the original data set to create a new data set of* 51 *values, which of the following must be true?*

I. *The median number of points per game for the new data set is less than the median number of points per game for the original data set.*

II. *The mean number of points per game for the new data set is less than the mean number of points per game for the original data set.*

a. *I only*

b. *II only*

c.

d. *Neither I nor II*

Your answer is incorrect.

The correct answer is: *II only*

Module 2 V1 (EASY)

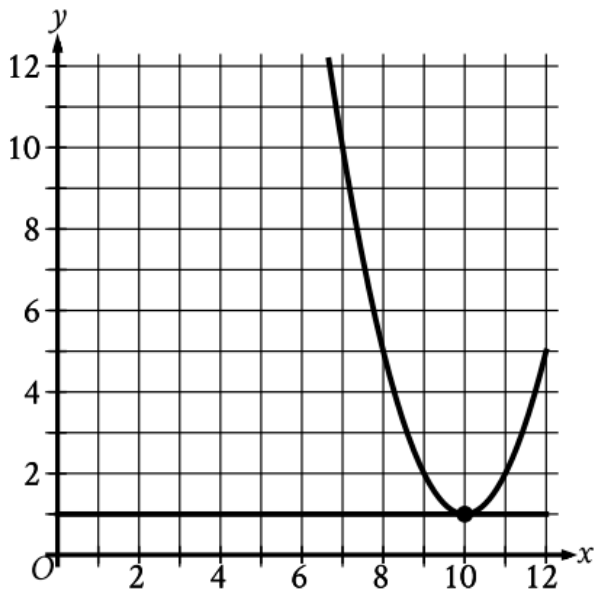
Started on	Tuesday, 3 June 2025, 11:09 PM
State	Finished
Completed on	Tuesday, 3 June 2025, 11:09 PM
Time taken	30 secs
Grade	**0.00** out of 22.00 (**0**%)

Question 1

Not answered

Marked out of 1.00

v2 (latest)



- *For the parabola in the system:*
  - *The parabola opens upward.*
  - *The vertex is at point (10 comma 1).*
  - *The parabola passes through the following points:*
    - *(9 comma 2)*
    - *(10 comma 1)*
    - *(11 comma 2)*
- *For the line in the system:*
  - *The line is horizontal.*
  - *The line passes through the following points:*
    - *(0 comma 1)*
    - *(10 comma 1)*

The graph of a system of a linear and a quadratic equation is shown. What is the solution x, y to this system?

a. 10,1

b. 10,-1

c. -10,1

d. 0,0

Your answer is incorrect.

The correct answer is: 10,1

Question 2

Not answered

Marked out of 1.00

v1 (latest)

A wheel completes 200 revolutions in 20 minutes. At this rate, how many revolutions per minute does this wheel complete?

a. 10

b. 180

c. 220

d. 400

Your answer is incorrect.

The correct answer is: 10

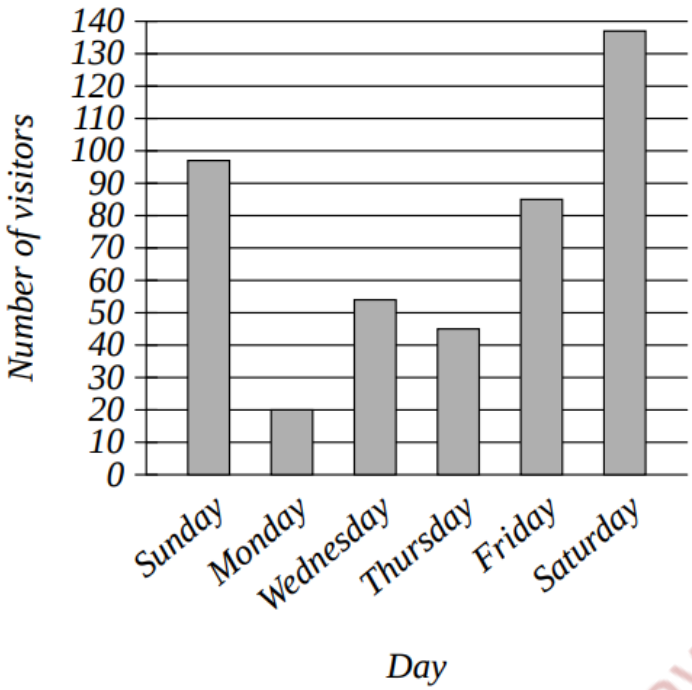
Question 3

Not answered

Marked out of 1.00

v2 (latest)

The bar graph shows the number of visitors at a store each day the store was open for business during a certain week.



- *All values are approximate.*
- *The data for the 6 categories are as follows:*
  - *Sunday: 97*
  - *Monday: 20*
  - *Wednesday: 54*
  - *Thursday: 45*
  - *Friday: 85*
  - *Saturday: 137*

During this week, how many days did the store have between 90 and 140 visitors?

Answer: ✕

The correct answer is: 2

Question 4

Not answered

Marked out of 1.00

v2 (latest)

If $2x = 8$, what is the value of $10x$?

a. 9

b. 13

c. 20

d. 40

Your answer is incorrect.

The correct answer is: 40

Question 5

Not answered

Marked out of 1.00

v2 (latest)

There are 650 objects in a box. Of these objects, 8% are cubes. How many cubes are in the box?

a. 8

b. 52

c. 260

d. 642

Your answer is incorrect.

The correct answer is: 52

Question 6

Not answered

Marked out of 1.00

v2 (latest)

Reynaldo purchased a box of pasta and some tomatoes at the grocery store. Reynaldo paid $ 2 for the box of pasta and $ 1.20 per pound for the
tomatoes. If Reynaldo paid a total of $ 4.40 for the box of pasta and the
tomatoes, which of the following equations can be used to find p, the number of pounds of tomatoes Reynaldo purchased? (Assume there is no sales tax.)

a. $1.20p + 2 = 4.40$

b. $1.20p - 2 = 4.40$

c. $1.20 + 2p = 4.40$

d. $1.20 - 2p = 4.40$

Your answer is incorrect.

The correct answer is: $1.20p + 2 = 4.40$

Question 7

Not answered

Marked out of 1.00

v2 (latest)

What is the y-intercept of the graph of $y = \frac{3}{11}^{x+1}$ *in the xy-plane?*

a. (3,11)

b. (0, 11)

c. (0, 3)

d. $(0, \frac{3}{11})$

Your answer is incorrect.

The correct answer is: $(0, \frac{3}{11})$

Question 8

Not answered

Marked out of 1.00

v1 (latest)

On a certain day in June, the lowest recorded wind speed in a town was 6 miles per hour mph and the highest recorded wind speed was 15 mph. Which inequality is true for all values of w, where w represents any wind speed, in mph, recorded in the town on this day?

a. $6 \leq w \leq 15$

b. $w \geq 15$

c. $w \leq 9$

d. $w \leq 6$

Your answer is incorrect.

The correct answer is: $6 \leq w \leq 15$

Question 9

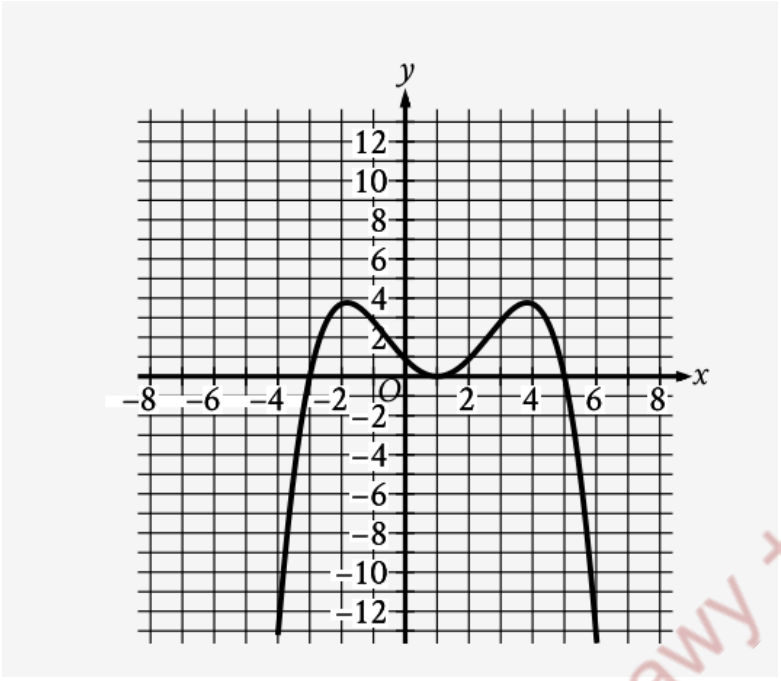
Not answered

Marked out of 1.00

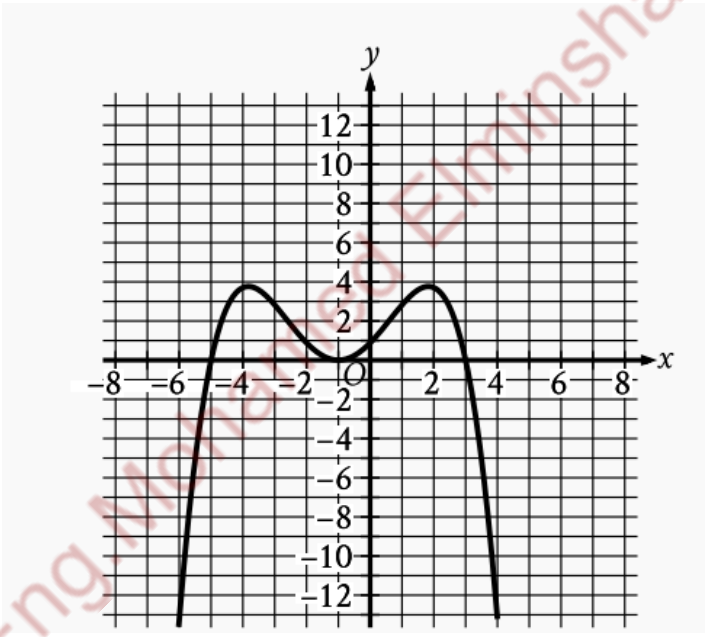
v1 (latest)

The table shows some values of x and their corresponding values of $f(x)$.
Which of the following graphs could be the graph of $y = f(x)$ in the xy-plane?

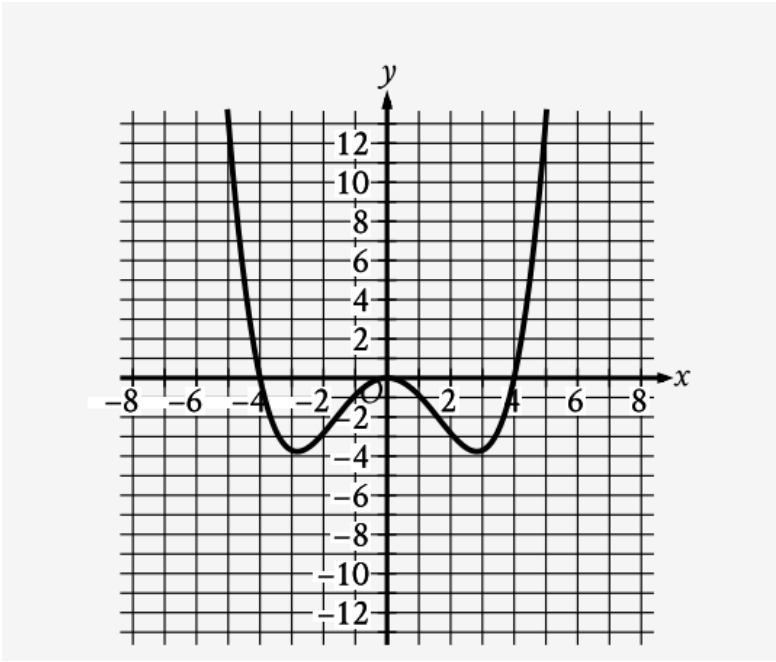
a.



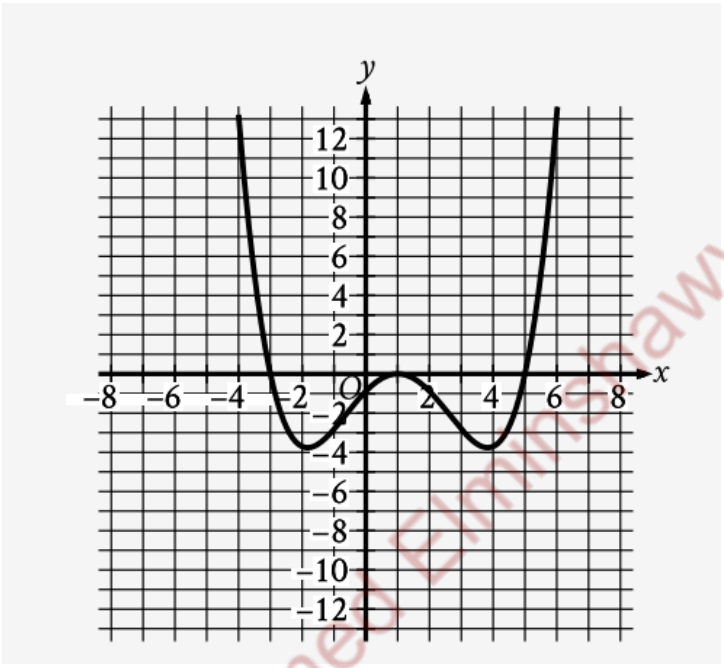
b.



c.

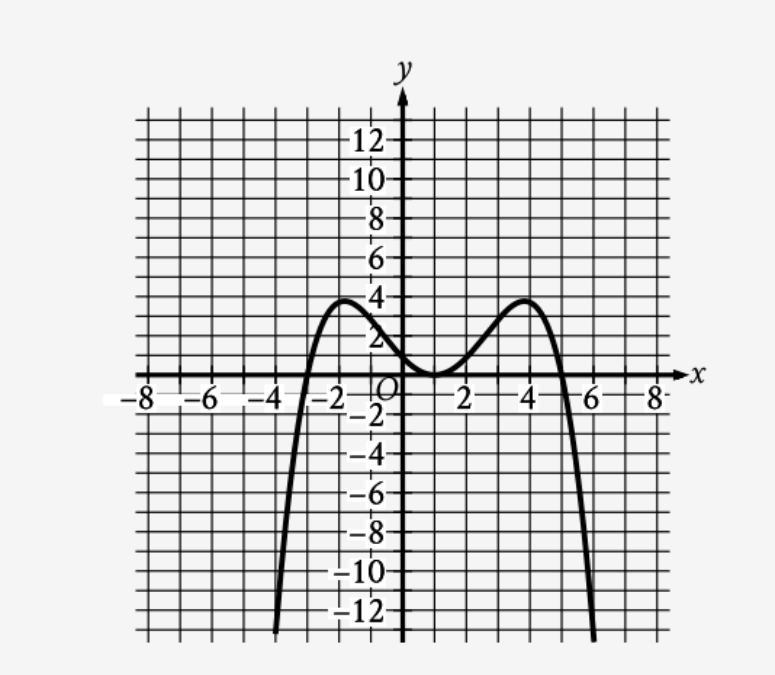


d.



Your answer is incorrect.

The correct answer is:

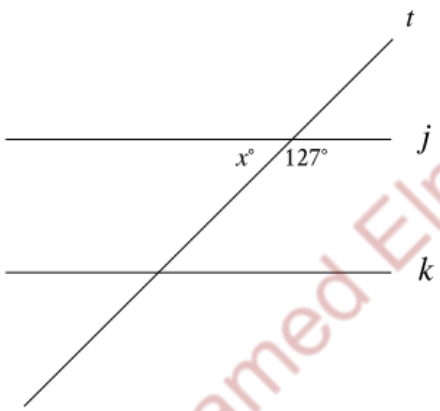


Question 10

Not answered

Marked out of 1.00

v2 (latest)



Note: Figure not drawn to scale.

In the figure, line j is parallel to line k. What is the value of x?

Answer: ✕

The correct answer is: 33

Question 11

Not answered

Marked out of 1.00

v2 (latest)

The function g is defined by $gx = \sqrt{8x + 9}$. What is the value of $g5$?

Answer:

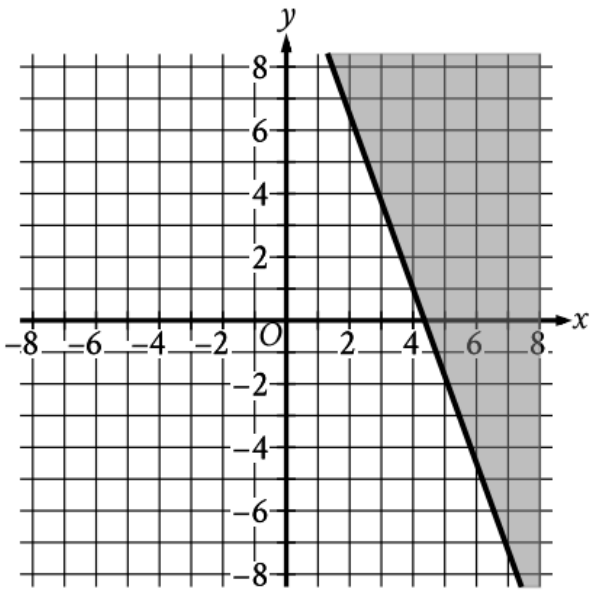
The correct answer is: 7

Question 12

Not answered

Marked out of 1.00

v3 (latest)



- *The boundary of the inequality is a solid line.*
  - *The line slants sharply down from left to right.*
  - *The line passes through the following points:*
    - *(4 comma 1)*
    - *(StartFraction 48 Over 11 EndFraction comma 0)*
    - *(5 comma negative seven fourths)*
- *The area above and to the right of the boundary is shaded.*

The shaded region shown represents solutions to an inequality. Which ordered pair x, y is a solution to this inequality?

a. (0, - 6)

b. (0, 6)

c. (-6, 0)

d. (6, 0)

Your answer is incorrect.

The correct answer is: (6, 0)

Question 13

Not answered

Marked out of 1.00

v2 (latest)

The function f is defined by $fx = -\frac{5}{16}x + 16$. *What is the slope of the graph of* $y = fx$ *in the xy-plane?*

a. -16

b. $-\frac{5}{16}$

c. $\frac{1}{16}$

d. 5

Your answer is incorrect.

The correct answers are: -16 , $-\frac{5}{16}$

Question 14

Not answered

Marked out of 1.00

v2 (latest)

$$y = 4{,}600a^x$$

The given equation, where a is a positive constant, gives the predicted number of bacteria, y, in a growth medium x hours after the number of bacteria was initially measured. According to the equation, what was the predicted number of bacteria initially measured in the growth medium?

Answer: ✕

The correct answer is: 4600

Question 15

Not answered

Marked out of 1.00

v2 (latest)

$$\sqrt{x} = \sqrt{53}$$

What value of x makes the given equation true?

Answer: ✕

The correct answer is: 53

Question 16

Not answered

Marked out of 1.00

v2 (latest)

A building has r residential and c commercial units for a total of 125 units. The residential units are 1,050 square feet and the commercial units are 2,500 square feet. All units in the building have a combined total of 167,500 square feet. Which system represents this situation?

a. $1{,}050r + 2{,}500c = 125$
$r + c = 167{,}500$

b. $1{,}050r + 2{,}500c = 125$
$r - c = 167{,}500$

c. $1{,}050r + 2{,}500c = 167{,}500$
$r + c = 125$

d. $1{,}050r + 2{,}500c = 167{,}500$
$r - c = 125$

Your answer is incorrect.

The correct answer is: $1{,}050r + 2{,}500c = 167{,}500$
$r + c = 125$

Question 17

Not answered

Marked out of 1.00

v1 (latest)

What is an x-intercept of the graph of the equation $y = x + 9x - 11x + 12$ in the xy-plane?

a. (1, 0)

b. (0, 9)

c. (11, 0)

d. (0, 12)

Your answer is incorrect.

The correct answer is: (1, 0)

Question 18

Not answered

Marked out of 1.00

v2 (latest)

For the linear function f, $f3 = 19$ and $f9 = 1$. Which equation defines f?

a. $fx = -\frac{1}{3}x + 20$

b. $fx = \frac{1}{3}x - 2$

c. $fx = -3x + 22$

d. $fx = -3x + 28$

Your answer is incorrect.

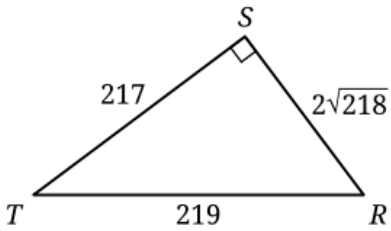
The correct answer is: $fx = -3x + 28$

Question 19

Not answered

Marked out of 1.00

v2 (latest)



Note: Figure not drawn to scale.

- *Angle upper S is a right angle.*
- *The length of side upper R upper S is 2 StartRoot 218 EndRoot.*
- *The length of side upper S upper T is 217.*
- *The length of side upper R upper T is 219.*
- *A note indicates the figure is not drawn to scale.*

What is the value of tan*R in the triangle shown?*

a. $\frac{2\sqrt{218}}{219}$

b. $\frac{219}{2\sqrt{218}}$

c. $\frac{2\sqrt{218}}{217}$

d. $\frac{217}{2\sqrt{218}}$

Your answer is incorrect.

The correct answer is: $\frac{217}{2\sqrt{218}}$

Question 20

Not answered

Marked out of 1.00

v2 (latest)

A cylinder has a diameter of 12 inches and a height of 16 inches. What is the volume, in cubic inches, of the cylinder?

a. 36π

b. 192π

c. 576π

d. 2304π

Your answer is incorrect.

The correct answer is: 576π

Question 21

Not answered

Marked out of 1.00

v2 (latest)

Line r is defined by the equation $2x - 3y = 8$. Line s is parallel to line r in the xy-plane. What is the slope of line s?

a. -3

b. -2

c. $\frac{2}{3}$

d. $\frac{3}{2}$

Your answer is incorrect.

The correct answer is: $\frac{2}{3}$

Question 22

Not answered

Marked out of 1.00

v3 (latest)

$$r = \sqrt{4w - 7}$$

The given equation relates the real numbers r and w, where $w > \frac{7}{4}$. Which equation correctly expresses w in terms of r?

a. $w = \frac{r^2}{4} + 7$

b. $w = \frac{r^2}{4} + \frac{7}{4}$

c. $w = \sqrt{4r - 7}$

d. $w = \sqrt{-7r + 4}$

Your answer is incorrect.

The correct answer is: $w = \frac{r^2}{4} + \frac{7}{4}$

Module 2 V2 (HARD)

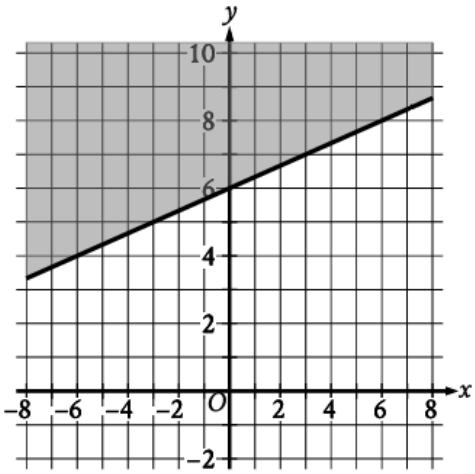
Started on	Tuesday, 3 June 2025, 11:14 PM
State	Finished
Completed on	Tuesday, 3 June 2025, 11:14 PM
Time taken	6 secs
Grade	**0.00** out of 22.00 (**0**%)

Question 1

Not answered

Marked out of 1.00

v2 (latest)



- *The boundary of the inequality is a solid line.*
  - *The line slants gradually up from left to right.*
  - *The line passes through the following points:*
    - *(negative 3 comma 5)*
    - *(0 comma 6)*
    - *(3 comma 7)*
- *The area above and to the left of the boundary is shaded.*

The shaded region shown represents the solutions to which inequality?

A.

$y \geq \frac{1}{3}x + 6$

B.

$y \geq 3x + 6$

C.

$y \leq \frac{1}{3}x + 6$

D.

$y \leq 3x + 6$

a. a

b. b

c. c

d. d

Your answer is incorrect.

The correct answer is: a

Question 2

Not answered

Marked out of 1.00

v2 (latest)

Line r is defined by the equation $5x-4y=3$. Line s is parallel to line r in the xy-plane. What is the slope of line s?

a. -5

b. -4

c. $\frac{4}{5}$

d. $\frac{5}{4}$

Your answer is incorrect.

The correct answer is: $\frac{5}{4}$

Question 3

Not answered

Marked out of 1.00

v2 (latest)

What is the y-intercept of the graph of $y = \frac{3}{11}^{x+1}$ *in the xy-plane?*

A.

3, 11

B.

0, 11

C.

0, 3

D.

$0, \frac{3}{11}$

a. a

b. b

c. c

d. d

Your answer is incorrect.

The correct answer is: d

Question 4

Not answered

Marked out of 1.00

v2 (latest)

The function f is defined by $fx = \frac{4}{11}x$. *What is the slope of the graph of* $y = fx$ *in the xy-plane?*

A.

0

B.

$\frac{4}{11}$

C.

$\frac{11}{4}$

D.

The slope is undefined.

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)

The function g is defined by $gx=7x^{-1}$. What is the value of $g8$?

a. -56

b. $\frac{1}{56}$

c. $\frac{7}{8}$

d. $\frac{8}{7}$

Your answer is incorrect.

The correct answer is: $\frac{7}{8}$

Question 6

Not answered

Marked out of 1.00

v2 (latest)

The kinetic energy, in joules, of an object with mass 37 kilograms traveling at a speed of v meters per second is given by the function K, where $Kv=\frac{1}{2}37v^2$. Which of the following is the best interpretation of $K0=0$ in this context?

a. The kinetic energy of the object is 0 joules when the mass of the object is 0 kilograms.

b. The speed of the object is 0 meters per second when the mass of the object is 0 kilograms.

c. The kinetic energy of the object is 0 joules when the object is traveling at a speed of 0 meters per second.

d. The height of the object is 0 meters when the object is traveling at a speed of 0 meters per second.

Your answer is incorrect.

The correct answer is: The kinetic energy of the object is 0 joules when the object is traveling at a speed of 0 meters per second.

Question 7

Not answered

Marked out of 1.00

v2 (latest)

A model estimates that a gray whale travels 72 to 77 miles each day during its migration. Based on this model, which inequality represents the estimated total number of miles, x, a gray whale could travel in 21 days of its migration?

a. $72 + 21 \leq x \leq 77 + 21$

b. $7221 \leq x \leq 7721$

c. $72 \leq 21 + x \leq 77$

d. $72 \leq 21x \leq 77$

Your answer is incorrect.

The correct answer is: $7221 \leq x \leq 7721$

Question 8

Not answered

Marked out of 1.00

v2 (latest)

If $8x+7=7x+7+58$, what is the value of $x+7$?

a. -7

b. 51

c. 58

d. 65

Your answer is incorrect.

The correct answer is: 65

Question 9

Not answered

Marked out of 1.00

v2 (latest)

At an amusement park, visitors wait in line for a certain ride. People in this line get on the ride at a rate of 13 people per minute. At the end of a certain day, 214 people are in line for the ride when the line closes. If these 214 people will get on the ride and no additional people are allowed to get in line, which function p models the number of people who remain in line t minutes after it closes?

a. $p(t)=-13t+214$

b. $p(t)=13t+214$

c. $p(t)=13t-214$

d. $p(t)=227$

Your answer is incorrect.

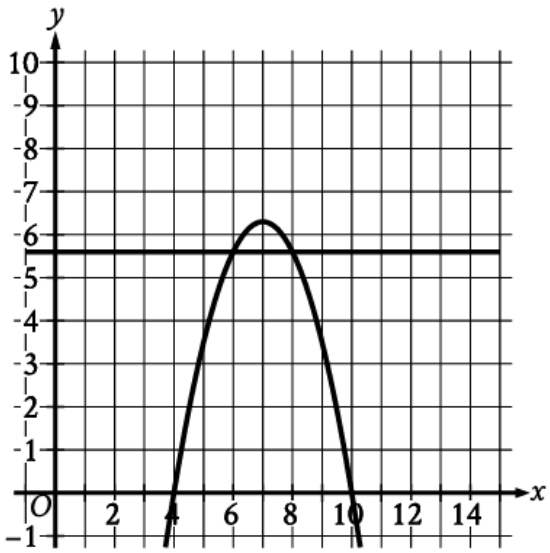
The correct answer is: $p(t)=-13t+214$

Question 10

Not answered

Marked out of 1.00

v2 (latest)



- *For the line in the system:*
  - *The line is horizontal.*
  - *The line passes through the following points:*
    - *(0 comma 5.6)*
    - *(6 comma 5.6)*
    - *(8 comma 5.6)*
- *For the parabola in the system:*
  - *The parabola opens downward.*
  - *The vertex is at the point (7 comma 6.3).*
  - *The parabola passes through the following points:*
    - *(4 comma 0)*
    - *(6 comma 5.6)*
    - *(8 comma 5.6)*
    - *(10 comma 0)*

The graph of a system of a linear equation and a quadratic equation is shown. A solution to the system is x, y. What is a possible value of x?

a. 5.6

b. 7

c. 8

d. 10

Your answer is incorrect.

The correct answer is: 8

Question 11

Not answered

Marked out of 1.00

v2 (latest)

A sphere has a radius of 3 inches and a density of 84 ounces per cubic inch.
What is the mass, in ounces, of the sphere?

a. $\frac{3\pi}{7}$

b. $\frac{7\pi}{3}$

c. 252π

d. $3{,}024\pi$

Your answer is incorrect.

The correct answer is: $3{,}024\pi$

Question 12

Not answered

Marked out of 1.00

v2 (latest)

$-83x - 11 + 4 = -52$

What is the sum of the solutions to the given equation?

Answer:

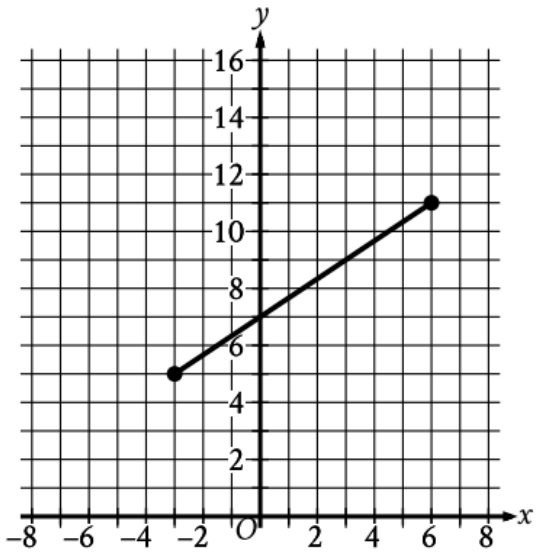
The correct answer is: -0.1325

Question 13

Not answered

Marked out of 1.00

v3 (latest)



- *The line segment slants gradually up from left to right.*
- *The line segment begins at the point (negative 3 comma 5).*
- *The line segment ends at the point (6 comma 11).*

The line segment shown in the xy-plane represents one of the legs of a right triangle. The area of this triangle is $42\sqrt{13}$ *square units. What is the length, in units, of the other leg of this triangle?*

a. 14

b. 28

c. $3\sqrt{3}$

d. $21\sqrt{13}$

Your answer is incorrect.

The correct answer is: 28

Question 14

Not answered

Marked out of 1.00

v2 (latest)

The function f is defined by $fx = -22^{x}$. *The function g is a decreasing linear function. In the xy-plane, the graphs of* $y = f(x)$ *and* $y = g(x)$ *intersect at two points,* h, j *and* k, m, *where* $j > m$. *When* $g(x) < f(x)$, *which of the following must also be true?*

a. x>k

b. x<h

c. x>k or x<h

d. $h < x < k$

Your answer is incorrect.

The correct answer is: $h < x < k$

Question 15

Not answered

Marked out of 1.00

v2 (latest)

Arturo builds and sells two types of steel tables. The revenue Arturo generates from selling each square table is 2 times his cost to build a square table, and the revenue Arturo generates from selling each hexagonal table is 2.5 times his cost to build a hexagonal table. In one year, Arturo's total cost to build tables was $ 42,120, and he generated a total revenue of $ 101,250 from selling all the tables he built that year. For that year, how much greater is the revenue Arturo generated from selling hexagonal tables than the revenue he generated from selling square tables?

a. $ 16,200

b. $ 25,920

c. $ 59,130

d. $ 68,850

Your answer is incorrect.

The correct answer is: $ 68,850

Question 16

Not answered

Marked out of 1.00

v2 (latest)

$$fx = \sqrt{x^3 + ax^2 + bx + c}$$

The function f is defined by the given equation, where a, b, and c are integer constants. In the xy-plane, the graph of y = fx passes through the point 90, and f0 = 27. What is the value of 9a + b?

Answer:

The correct answer is: -162

Question 17

Not answered

Marked out of 1.00

v2 (latest)

Two lines intersect at exactly one point, forming two acute angles and two obtuse angles. The measure of one of these angles is $3x$ - 310°. Which of the following could NOT be the sum of the measures of any two of these angles

a. $-6x + 620°$

b. $-6x + 980°$

c. $6x - 620°$

d. 180°

Your answer is incorrect.

The correct answer is: $-6x + 620°$

Question 18

Not answered

Marked out of 1.00

v3 (latest)

The solutions to $x^2 + 10x + 19 = 0$ are r and s, where $r < s$. The solutions to $x^2 + 10x + 1 = 0$ are t and u, where $t < u$. The solutions to $x^2 + 20x + c = 0$, where c is a constant, are $r + u$ and $s + t$. What is the value of c?

Answer:

The correct answer is: 94

Question 19

Not answered

Marked out of 1.00

v2 (latest)

For the linear function f, $f(3) = 19$ and $f(9) = 1$. Which equation defines f?

a. $fx = -\frac{1}{3x} + 20$

b. $fx = \frac{1}{3x} - 2$

c. fx= -3x +22

d. fx= -3x +28

Your answer is incorrect.

The correct answer is: fx= -3x +28

Question 20

Not answered

Marked out of 1.00

v3 (latest)

In triangle XYZ, the measure of angle X is 90°. Point W lies on segment YZ, and segment WX is perpendicular to segment YZ. The length of segment WY is 524, and the length of segment WX is 393. What is the value of tanZ*?*

a. $\frac{3}{5}$

b. $\frac{3}{4}$

c. $\frac{4}{5}$

d. $\frac{4}{3}$

Your answer is incorrect.

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

Question 21

Not answered

Marked out of 1.00

v2 (latest)

The mass of object A is 469% of the mass of object B, and the mass of object A is 0.670% of the mass of object C. If the mass of object C is p% of the mass of object B, what is the value of p?

Answer:

The correct answer is: 70000

Question 22

Not answered

Marked out of 1.00

v3 (latest)

For the function f, for each increase in the value of x by c, where c is a positive constant, the value of fx increases by a factor of 27. Which of the following equivalent forms of the function f displays $\frac{1}{2}$ as a coefficient of x?

A.

$fx = 353^{\frac{1}{2}x}$

B.

$fx = 353^{3\,\frac{1}{6}x}$

C.

$fx = 359^{\frac{1}{4}x}$

D.

$fx = 3527^{\frac{1}{3}x\,\frac{1}{2}}$

a. a

b. b

c. c

d. d

Your answer is incorrect.

The correct answer is: b