

**Started on** Friday, 12 January 2024, 9:55 AM

**State** Finished

**Completed on** Friday, 12 January 2024, 9:55 AM

**Time taken** 11 secs

**Marks** 0.00/20.00

**Grade** 0.00 out of 10.00 (0%)

### Question 1

Not answered

Marked out of 1.00

If  $f(x) = 7x + 12$  and  $f(g(x)) = 21x^2 + 40$

Find  $g(4)$

- 40
- 52
- 40
- 50

Your answer is incorrect.

The correct answer is: 52

### Question 2

Not answered

Marked out of 1.00

If  $25^{3x} = 125^{3x-4}$ . Find the value of  $x$

- 1
- 5
- 11
- 4

Your answer is incorrect.

The correct answer is: 4

**Question 3**

Not answered

Marked out of 1.00

$$|2x - 3| = 3$$

In the equation above. Find the positive solution

- 1
- 3
- 0
- 5

Your answer is incorrect.

The correct answer is: 3

**Question 4**

Not answered

Marked out of 1.00

$$2x - y = 5$$

$$x + 2y = 32$$

In the system of equation above. After how many steps y will be eliminated?

- 1
- 2
- 3
- 4

Your answer is incorrect.

The correct answer is: 2

**Question 5**

Not answered

Marked out of 1.00

$$2x - y = 5$$

$$x + 2y = 32$$

In the system of equation above. Find  $x + 2y$

- 1
- 33
- 2
- 32

Your answer is incorrect.

The correct answer is: 32

**Question 6**

Not answered

Marked out of 1.00

$$\sqrt{x - 4} = x$$

Which of the following is the value of  $x$ ?

- 0
- 4
- 10
- No solution

Your answer is incorrect.

The correct answer is: No solution

**Question 7**

Not answered

Marked out of 1.00

$$\text{If } a = x^2 + \frac{x}{3}$$

$$z = 6x - 2$$

What is **a** in terms of **z**?

- $\frac{z^2 - 4z + 8}{36}$
- $\frac{z^2 - 4z + 8}{12}$
- $\frac{z^2 - 6z + 8}{36}$
- $\frac{z^2 - 6z + 8}{12}$

Your answer is incorrect.

The correct answer is:  $\frac{z^2 - 4z + 8}{12}$ **Question 8**

Not answered

Marked out of 1.00

$$x^2 + ax + b$$

If the y-coordinate of the vertex is 4. What is **b** in terms of **a**?

- $4 + \frac{a^2}{2}$
- $4 - \frac{a^2}{2}$
- $4 - a^2$
- $4 + \frac{a^2}{4}$

Your answer is incorrect.

The correct answer is:  $4 + \frac{a^2}{4}$

**Question 9**

Not answered

Marked out of 1.00

If  $f(x)=3x+2$ ,  $g(x)=3+f(x)$ . find  $g(3)$

- 17  
 11  
 14  
 19

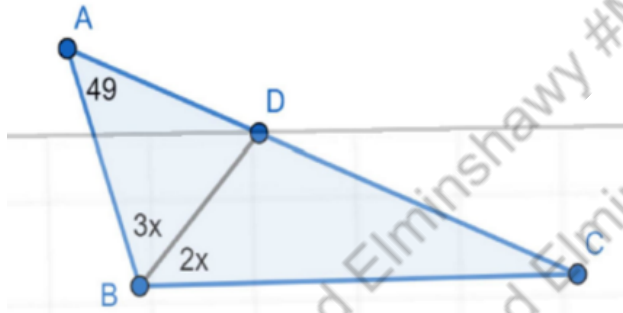
Your answer is incorrect.

The correct answer is: 14

**Question 10**

Not answered

Marked out of 1.00



In the triangle above angle  $B = 35$ . Angle  $DBC = \frac{2}{5} \text{ABC}$ . angle  $DBA = \frac{3}{5} \text{ABC}$ . Find the measure of angle ABD

- 57.6  
 62.5  
 50  
 71

Your answer is incorrect.

The correct answer is: 57.6

**Question 11**

Not answered

Marked out of 1.00

Which quadratic equation that has a sum of solutions -8 and the product of the solution 15

- $x^2+8x+15$
- $3x^2-10x+8$
- $3x^2+10x-8$
- $-3x^2-10x-8$

Your answer is incorrect.

The correct answer is:  $x^2+8x+15$

**Question 12**

Not answered

Marked out of 1.00

$$\text{If } \frac{a}{2} = 3b$$

$$3a+5b=11$$

Find the value of b

- 11/22
- 1/33
- 1/11
- 11/23

Your answer is incorrect.

The correct answers are: 11/22, 11/23

**Question 13**

Not answered

Marked out of 1.00

If  $\sin(x)=0.5$  and  $0 < x < 90$ . What is the value of  $\cos x$ ?

- 0.5
- $\frac{\sqrt{3}}{2}$
- 0.5
- $-\frac{\sqrt{3}}{2}$

Your answer is incorrect.

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

**Question 14**

Not answered

Marked out of 1.00

Find the value of x in the equation

$$2(3x-2)+4-3=3(x-1)+3$$

- 1
- 2
- 1
- 2

Your answer is incorrect.

The correct answer is: 1

**Question 15**

Not answered

Marked out of 1.00

Which of the following are solutions to the equation

$$(x-2)^2 = \frac{16}{25}$$

- $x = \sqrt{\frac{4}{5}}$
- $x = \frac{-4}{5}$
- $x = \frac{6}{5}$
- $x = -\frac{14}{5}$

Your answer is incorrect.

The correct answer is:  $x = \frac{6}{5}$

**Question 16**

Not answered

Marked out of 1.00

Find the value of x in the equation below

$$\frac{6}{2x-1} = \frac{x}{x-1}$$

- 1.5
- 1
- 2.5
- 3

Your answer is incorrect.

The correct answer is: 1.5

**Question 17**

Not answered

Marked out of 1.00

What is the axis of symmetry of the equation

$$\frac{1}{2} (2x-3)(x-4)$$

- 3.5
- 1.5
- 1
- 2.75

Your answer is incorrect.

The correct answer is: 2.75

**Question 18**

Not answered

Marked out of 1.00

Triangle ABD is right isosceles at D. What is the measure of angle B?

- 90
- 45
- 30
- 60

Your answer is incorrect.

The correct answer is: 45



**Question 19**

Not answered

Marked out of 1.00

If  $3xi+2y-2yi=3i+2$ . Find the sum of x and y

- 1
- $\frac{5}{3}$
- 3
- $\frac{8}{3}$

Your answer is incorrect.

The correct answer is:  $\frac{8}{3}$

**Question 20**

Not answered

Marked out of 1.00

If  $B=f+\frac{FMT}{K}$ . Make f as a subject

- $\frac{BK}{K+MT}$
- $\frac{BK}{K-MT}$
- $\frac{-BK}{K+MT}$
- $\frac{BK}{-K+MT}$

Your answer is incorrect.

The correct answer is:  $\frac{BK}{K+MT}$

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**Grade** 0.00 out of 10.00 (0%)

### Question 1

Not answered

Marked out of 1.00

If  $12x - 2y = 1$ , then  $\frac{216^2 x}{6^y} = ?$

- $\sqrt{6}$
- 6
- 10
- 1

Your answer is incorrect.

The correct answer is:  $\sqrt{6}$

### Question 2

Not answered

Marked out of 1.00

In a certain country The students that are allowed to vote must be at least 21 years old. For every 2 students more than or equal to 21, there are 5 students less 21 years old. If there are 952 'w' students. Find the number of students that allowed to vote . ,

- 190
- 408
- 272
- 680

Your answer is incorrect.

The correct answer is: 272

**Question 3**

Not answered

Marked out of 1.00

Which of the following is equivalent to the expression below?

$$\frac{2x}{x^2-3x+2} + \frac{x+5}{x-1} + \frac{x-7}{x-2}$$

- $\frac{2x^2-13x-3}{x^2-3x+2}$
- $\frac{2x^2-3x-3}{x^2-3x+2}$
- $\frac{2x^2-3x-17}{x^2-3x+2}$
- $\frac{2x^2-5x-3}{x^2-3x+2}$

Your answer is incorrect.

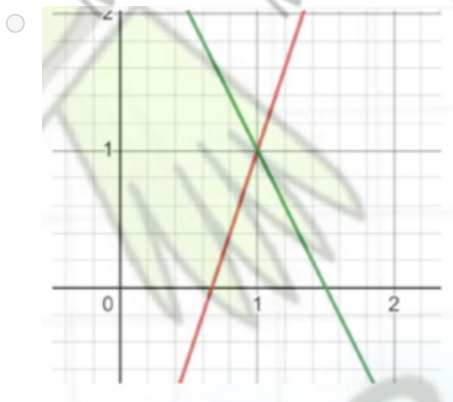
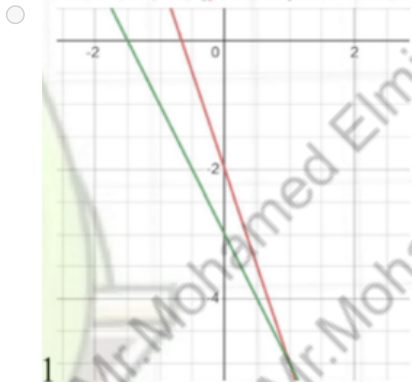
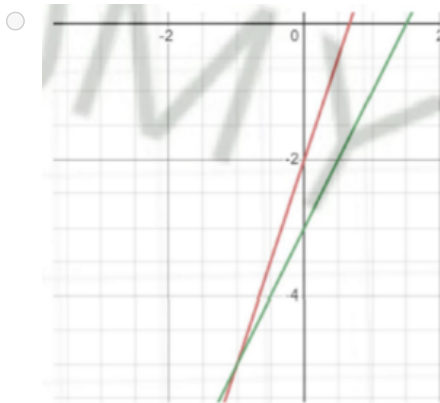
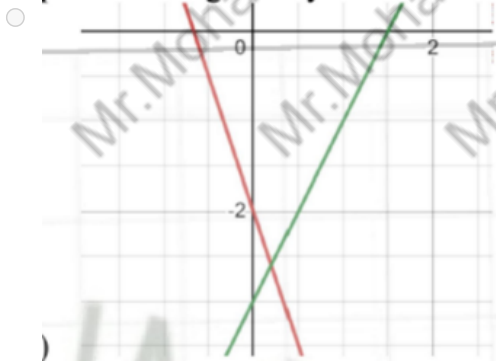
The correct answer is:  $\frac{2x^2-3x-3}{x^2-3x+2}$

**Question 4**

Not answered

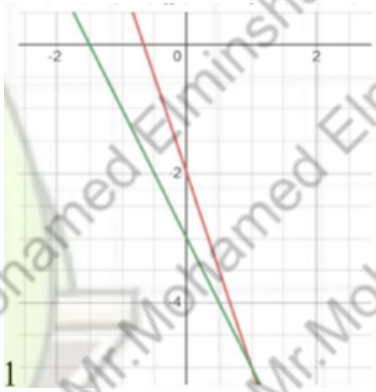
Marked out of 1.00

If  $f(x)+2=3x$  and  $2x=3-g(x)$ , of the following represent the given system



Your answer is incorrect.

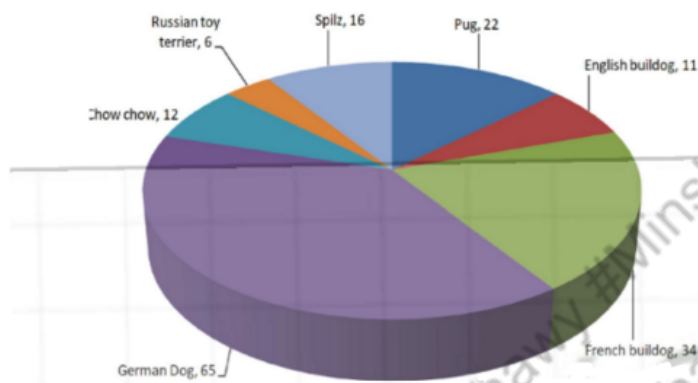
The correct answer is:



**Question 5**

Not answered

Marked out of 1.00



A pet organization classified the types of dogs in a certain country as shown above. If 66 were sheltered and half of the remaining given to families. that left with how many dogs?

- 100
- 50
- 25
- 33

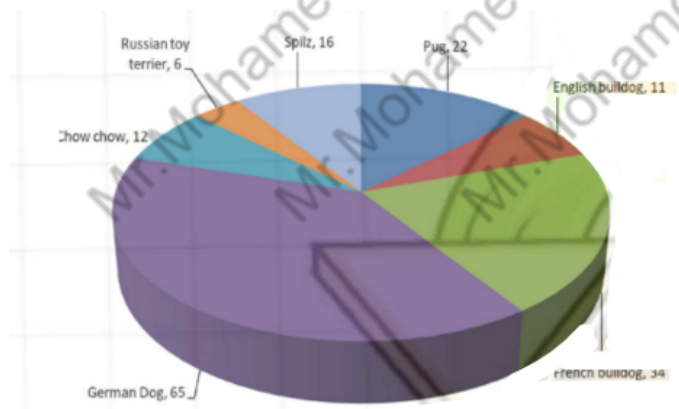
Your answer is incorrect.

The correct answer is: 50

**Question 6**

Not answered

Marked out of 1.00



A pet organization classified the types of dogs, in a certain country as shown above. What is the ratio of types French to pug?

- 11/17
- 17/11
- 10/16
- 16/10

Your answer is incorrect.

The correct answer is: 17/11

**Question 7**

Not answered

Marked out of 1.00

Bati5a has a dog can't consume more than 550 calories per day and eating 3 meals/day. Which of the following types of food the dog can eat each meal per day?

- Type A 170c
- Type A 175c
- Type c 180c
- All of the above

Your answer is incorrect.

The correct answer is: All of the above

**Question 8**

Not answered

Marked out of 1.00

Bati5a is ordering delivery 40% of the number of days in a month for his dog. How many days that fat boy orders in July and August?

- 23 Days
- 25 Days
- 26 Days
- 27 Days

Your answer is incorrect.

The correct answer is: 25 Days

**Question 9**

Not answered

Marked out of 1.00

A right cylinder with the base's radius of 29 and height of 18. Find the volume

- 15138
- $15138 \pi$
- $1138 \pi$
- 1138

Your answer is incorrect.

The correct answer is:  $15138 \pi$

**Question 10**

Not answered

Marked out of 1.00

$$\left(\frac{1}{x+4}\right) = \left(\sqrt[6]{6}\right)$$

In the equation above. Find the approximate real value of x

- 4
- 1
- 1
- 3.6

Your answer is incorrect.

The correct answer is: -3.6

**Question 11**

Not answered

Marked out of 1.00

Abeer and Jana went to buy from a store, Abeer bought 6 mugs and 12 spoons for 624\$. Jana bought 8 mugs and 9 spoons for 678\$. How much of 3 mugs and 2 spoons cost?

- 224
- 82
- 104
- 60

Your answer is incorrect.

The correct answer is: 224

**Information****Questions 12 , 13 , and 14 related to the table****below****Invest****Money****Initial investment**

1400\$

**after adding a% interest**

b

**after reducing 3\$**

1413.71

**after adding a% interest**

d

**after withdraw 700\$**

e



**Question 12**

Not answered

Marked out of 1.00

What is the interest?

- 1
- 1.2
- 2
- 14

Your answer is incorrect.

The correct answer is: 1.2

**Question 13**

Not answered

Marked out of 1.00

What are the values of d and b?

- 1.2 and 730.71
- 1430.7 and 1416.71
- 733.71 and 1419.71
- 1419.71 and 733.71

Your answer is incorrect.

The correct answer is: 1430.7 and 1416.71

**Question 14**

Not answered

Marked out of 1.00

How much left after the withdrawal amount?

- 1.2
- 1419.71
- 1433.71
- 730.71

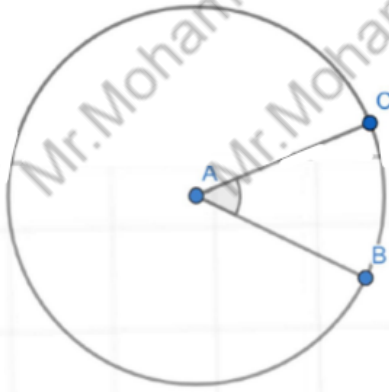
Your answer is incorrect.

The correct answer is: 730.71

**Question 15**

Not answered

Marked out of 1.00



Circle A is shown above with center (1,2) and point B (6,1), the measure of major arc CAB is  $270^\circ$ .

Find the area of sector with the minor arc BAC (the graph not to scale)

- $\frac{29}{2}\pi$
- $\frac{29}{3}\pi$
- $\frac{13}{2}\pi$
- $\frac{2}{5}\pi$

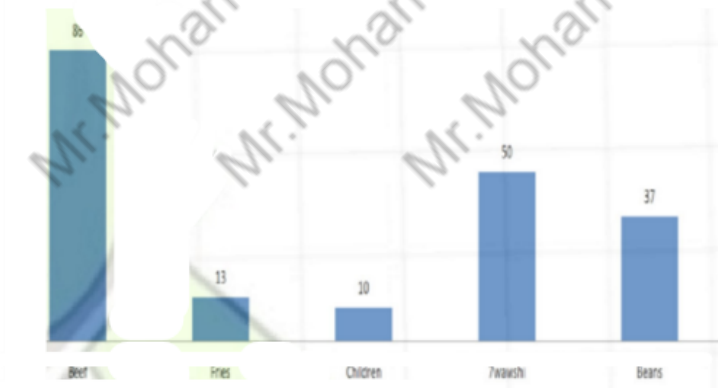
Your answer is incorrect.

The correct answer is:  $\frac{13}{2}\pi$

**Question 16**

Not answered

Marked out of 1.00



The graph above represents the number of sandwiches ordered in Abo3li restaurant. What is the percentage of Children sandwiches order from Abo3li

- 10.6
- 9.5
- 5.1
- 12

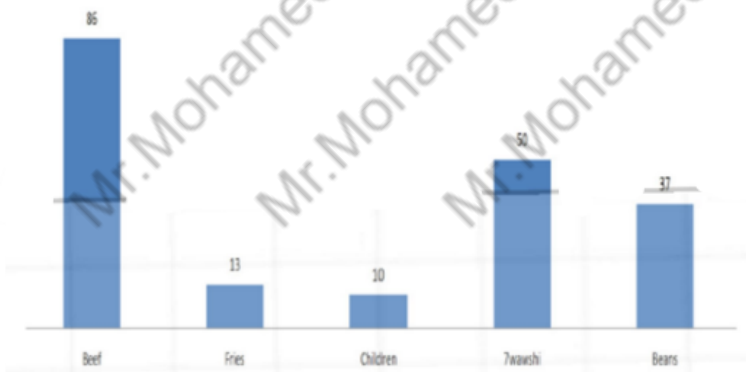
Your answer is incorrect.

The correct answer is: 5.1

**Question 17**

Not answered

Marked out of 1.00



The graph above represents the number of sandwiches ordered in Abo3li restaurant. What is the ratio of 7wawshi to chicken?

- 5:1
- 1:5
- 2:11
- 2:21

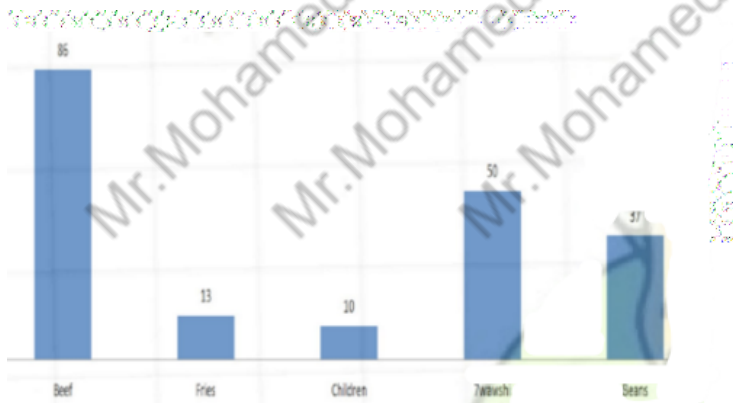
Your answer is incorrect.

The correct answer is: 5:1

**Question 18**

Not answered

Marked out of 1.00



The graph above represents the number of sandwiches ordered in Abo3li restaurant . If the total number of sandwiches ordered from 1 to 3 pm is shown above, the number of sandwiches that is even decrease to half during 3 to 4 PM and the others no change, and didn't sell any Fries from 3 to 4 PM Which of the following must be true?

- I)The total number of sandwiches sold is 196 during that day
- II)The number of orders from 3 to 4 pm is about 56% of the ones from 1 to 3 pm
- III)The least sold ifrs,,gries

- I only
- II only
- II and III only
- I, II, and III

Your answer is incorrect.

The correct answer is: II only

**Question 19**

Not answered

Marked out of 1.00

If  $x$  is directly proportion to  $y$ .  $x=2$  when  $y$  is 9 . What is the value of  $y$  when  $3x=7$ ?

- 11
- 10.5
- 12.5
- 31.5

Your answer is incorrect.

The correct answer is: 10.5

**Question 20**

Not answered

Marked out of 1.00

Find the value of  $3^2+4*3-3^2+8$ 

- 18
- 17
- 23
- 20

Your answer is incorrect.

The correct answer is: 20

**Question 21**

Not answered

Marked out of 1.00

Item costs 7 \$ each and 2.5 \$ flat fee. If Habiba spent  $y$  in total .Which of the following resents the total cost Habiba will pay for  $t$  items above?

- $y=7t-2.5$
- $y=7t+2.5$
- $y=-7t-2.5$
- $y=-7t$

Your answer is incorrect.

The correct answer is:  $y=7t+2.5$ **Question 22**

Not answered

Marked out of 1.00

Item costs 7 \$ each and 2.5 \$ flat fee. If Habiba has 68.5\$ in total .What is the max items Has she bought?

- 7
- 8
- 9
- 10

Your answer is incorrect.

The correct answer is: 9

**Question 23**

Not answered

Marked out of 1.00

If  $y > x + 2$  and  $2y - x \leq 2$ . What is the greatest integer possible value of  $x$ ?

- 2
- 3
- 4
- 5

Your answer is incorrect.

The correct answer is: -3

**Question 24**

Not answered

Marked out of 1.00

There are 3 chocolate . One is triangular plain , one rectangular plain and the third is nuts. What is the probability to eat a plain chocolate?

- 1/3
- 1
- 1/2
- 2/3

Your answer is incorrect.

The correct answer is: 2/3

**Question 25**

Not answered

Marked out of 1.00

If  $x^3 + 2x^2 + 4x + 8 = (2x^2 + bx - c)(ax + 1)$  is true for all values of  $x$ . Which of the following has the greatest value?

- $a + 2\sqrt{\begin{matrix} c \end{matrix}}$
- $b - \sqrt{\begin{matrix} 2c \end{matrix}}$
- $\sqrt{\begin{matrix} ac - b \end{matrix}}$
- $2b - \sqrt{\begin{matrix} c \end{matrix}}$

Your answer is incorrect.

The correct answer is:  $a + 2\sqrt{\begin{matrix} c \end{matrix}}$

**Question 26**

Not answered

Marked out of 1.00

If  $y = \left(\frac{x+1}{x+4}\right) + 1$  has a vertical asymptote  $x=a$  and horizontal asymptote  $y=b$ . Find

$\left| \begin{matrix} a-b \end{matrix} \right|$

- 5
- 4
- 2
- 6

Your answer is incorrect.

The correct answer is: 6

**Question 27**

Not answered

Marked out of 1.00

12 red and 10 blue balls in a bag. What is the probability select 2 red balls without replacement?

- $\frac{7}{36}$
- $\frac{2}{22}$
- $\frac{2}{7}$
- $\frac{36}{121}$

Your answer is incorrect.

The correct answer is:  $\frac{2}{7}$

**Question 28**

Not answered

Marked out of 1.00

A car weighs 2500 pounds. Contains 3 persons of average weigh 87 and 3 boxes of 200 Kg. What is the total weight of the car in KG? (knowing 1 kg= 2.20462 pounds)

- 1134
- 11800
- 1595
- 1178

Your answer is incorrect.

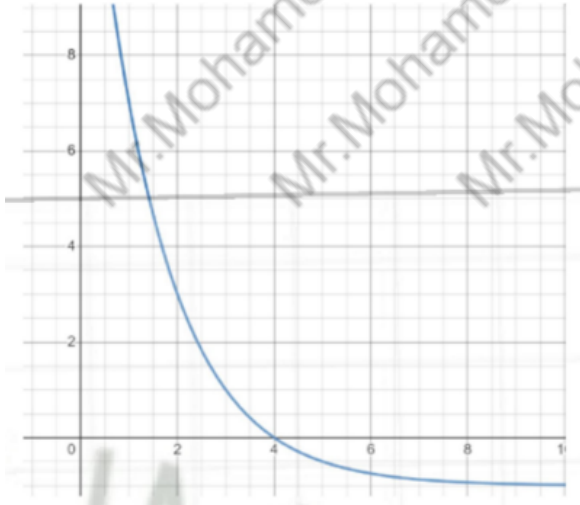
The correct answer is: 1595



**Question 29**

Not answered

Marked out of 1.00



The graph of  $f(x-4)$  is shown above. Find the value of  $x$  when  $f(x)=0$

- 4
- 0
- 7
- 3

Your answer is incorrect.

The correct answer is: 0

**Question 30**

Not answered

Marked out of 1.00



In the  $xy$ -plane above  $x^2 + y^2 < r^2$  is shown but line  $y(\leq) 2x + 1$  not shown. Which of the following is true?

- All points on the circle are included in the interval
- Less than half the circle is included
- More than half the circle is included
- The origin is not included

Your answer is incorrect.

The correct answer is: More than half the circle is included

**Question 31**

Not answered

Marked out of 1.00

If u have 58.50\$. How many copybooks can you buy when each copybook is sold for 7\$ and the seller adds 2.5 at the end?

- 5
- 6
- 7
- 8

Your answer is incorrect.

The correct answer is: 8

**Question 32**

Not answered

Marked out of 1.00

There is a competition. If you answered a correct question you choose a gift from 24 boxes. These boxes are numbered from 3. One of these boxes contains a car gift. If Maria answered the question correctly, What is the probability that she choose the gift car?

- $\left(\frac{1}{7}\right)$
- $\left(\frac{1}{12}\right)$
- $\left(\frac{1}{24}\right)$
- $\left(\frac{1}{23}\right)$

Your answer is incorrect.

The correct answer is:  $\left(\frac{1}{24}\right)$

**Question 33**

Not answered

Marked out of 1.00

If  $x^4 + 2x^3 = 0$ . How many intersection point/s with x-axis?

- 1
- 2
- 4
- 0

Your answer is incorrect.

The correct answer is: 2

**Question 34**

Not answered

Marked out of 1.00

If the measure of the angles of pentagon is 2:3:3:4:5. What is the measure of the smallest angle?

- 107
- 63.5
- 111
- 67.4

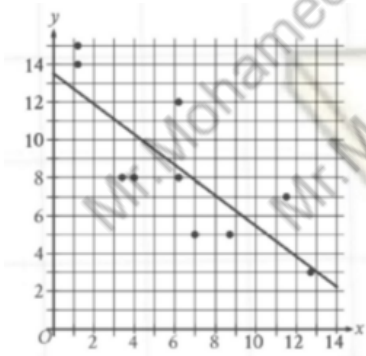
Your answer is incorrect.

The correct answer is: 63.5

**Question 35**

Not answered

Marked out of 1.00



In the graph above x-axis represents number of cars that each family own, and y-axis represents number of members in each family. What is the difference between the actual number of cars of the families that has 4 and 7 members each?

- 10
- 1
- 2
- 3

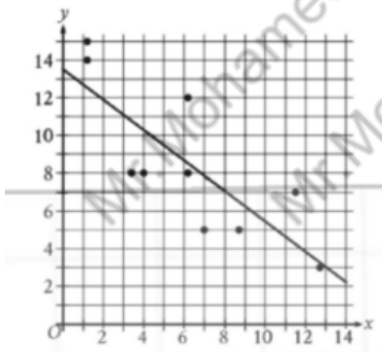
Your answer is incorrect.

The correct answer is: 3

**Question 36**

Not answered

Marked out of 1.00



In the graph above x-axis represents number of cars that each family own, and y-axis represents number of members in each family.

Which of the following must be true?

- when number of cars increases in each, number of members of each family decreases
- when number of cars decreases in each, number of members of each family decreases
- both increase together
- No change

Your answer is incorrect.

The correct answer is: when number of cars increases in each, number of members of each family decreases