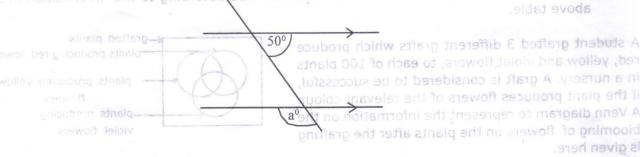
Part A

- (1) If the price of 8 pens is 72 rupees, find the price of one pen. The price of one pens is 72 rupees, find the price of one pens.
- (ii) Add a column for fx and complete it. (iii) Calculate the mean number of books reused by a class.
- (iv) Find the number of books which could be expected to be reused in 5 1.0 x 1.0 v (vi) [(t)]
- (v) "The number of books reused in the school where the arruping and in the policy of the information in the 1300". Show that the above statement could be true according to the information in the

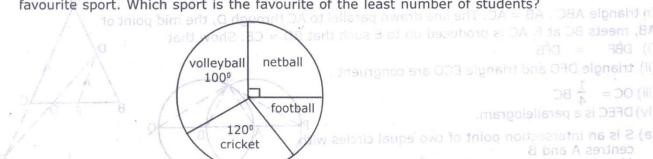


- (I) Copy the given Venn diagram and shade the region which represents the plants producing only
- (5) What is the loss that has to be borne when a chair which is blood to the following information in the Venn diagram.

 (ii) Include the following information in the Venn diagram.

 The number of plants producing only yellow flowers is 25
- The number of plants producing both yellow and violet flowers, but not flow from the number of plants producing both yellow and red flowers is 10. How many plants do not produce yellow flowers?
- (7) Express 2.081 in millilitres.

 (vi) The number of plants producing red flowers is 45 and the number of plants producing only violet.
- (8) The pie chart represents information obtained from a group of students about their favourite sport. Which sport is the favourite of the least number of students?



- (9) What is the probability of obtaining an odd number when a fair die with the numbers 1 to 6 marked on its faces is tossed up once?
- (10) What is the perimeter of the triangle in the figure? Will all the sum of the triangle in the figure? Will all the sum of the triangle in the figure?

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- (11) One man requires 8 days to complete a certain task. If two such men work for 2 days, (52) what fraction of the task can they complete?
- (12) From the following expressions, select and write down tll the expressions that give the answer 4y. 2(y + y) (2y + y) $2y \times 2y$ 2y + 2y 2 + 2y
- (13) Find the value of x based on the information in the figure.
 - Extermine for which value of the radius, the numerical value of the circumference of a circle equals the numerical value of its area. :008

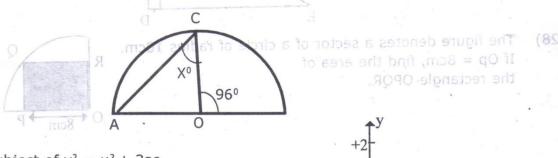
 (24) Indicate the solutions of the inequality x -2 -3 on the number line given below.

 -5 -4 -3 -2 -1 0 .1 +2 +3 .00 -5

 In the circle with centre O illustrated in the figure, AC is a chord and EF is a tangent through C. The points D and B are on the circle. If ACE = 60° find the magnitude of are on the circle. If ACE = 60° find the magnitude of
- (14) If a water pump takes 24 minutes to fill 2/3 of a tank, how many minutes will it take the pump to fill half the tank?

 000 02 : 1 elected and of new A dem A
- (15) The marks obtained by 9 students who faced a certain test are given below. I ship to be something the model of the marks.

 (ii) By what length is an actual distance of 250 metres represented by the model of the marks.
- (16) Factorize: $x^2 a^2 + x + a$
- (17) A discount of 8% is given on the marked price when an item is sold. Find the marked price of an item which was sold for 368 rupees.
- (18) The figure denotes a semi-circle with centre O. If $\widehat{COB} = 96^{\circ}$, find the value of x.



- (19) Make "s" the subject of $v^2 = u^2 + 2as$
- A straight road AB at the location C of a tree, 4 m conglithe straight road, both of which are located Spol a 8pol + 2polS of substantial tree with the straight road, both of which are located Spol a 8pol + 2polS of substantial tree with the straight road, both of which are located Spol a 8pol + 2polS of substantial tree with the straight road of substantial tree with the substantial t
- (21) What is the

 (i) gradient can the tree can which is 6 in from the tree can of the straight in the tree can of the straight in the theoretic in the tree can of the straight in the through 'A' and 'B' given in the figure?

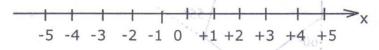
0) Find three consecutive positive integers a, b and c such that a + b is a perfect square and b + c is a perfect cube.

(26)

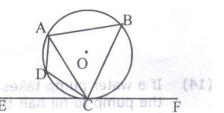
(75)

In the figure, AB = 2cm,

- (22) The figure denotes a regular hexagon ABCDEF. Give reasons as to why AC = FB From the following expressions, select ay write down til the expressions that give the $2(y+y) \qquad (2y+y)$ (13) Find the value of x based on the informa
- (23)Determine for which value of the radius, the numerical value of the circumference of a circle equals the numerical value of its area.
- (24)Indicate the solutions of the inequality x - 2 > -3 on the number line given below.



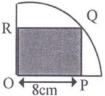
(25)In the circle with centre O illustrated in the figure, AC is a chord and EF is a tangent through C. The points D and B are on the circle. If $ACE = 60^{\circ}$ find the magnitude of takes 24 minutes to fill 2/3 of a tank, how many minutes will it. DOA



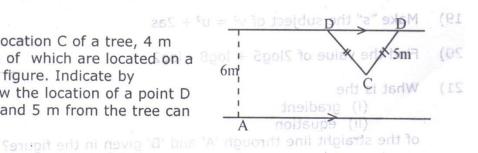
- (26)A map has been drawn to the scale 1: 50 000.
 - (15) The marks obtained by 9 studenbarnesarger teartement sonatal distance in William (15) by 1 cm in the map?
 - (ii) By what length is an actual distance of 250 metres represented in the map? the range B of theAe marks
- (27)In the figure, AB = 2cm, ED = 8cm and AD = 5cm.Find the length of AC.



- The figure denotes a semi-circle with centre O. If Cos = 96°, find the value of x.
- The figure denotes a sector of a circle of radius 10cm. (28)If Op = 8cm, find the area of the rectangle OPOR.

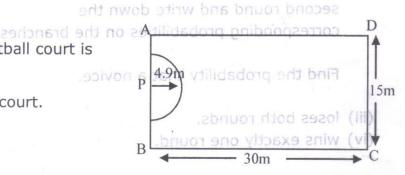


(29)A straight road AB and the location C of a tree, 4 m from the straight road, both of which are located on a Spol + Zpols to suit flat ground are given in the figure. Indicate by sketching on the figure, how the location of a point D which is 6 m from the road and 5 m from the tree can be found.



Find three consecutive positive integers a, b and c such that a + b is a perfect square and (30)b + c is a perfect cube.

- 1) Mala bought a stock of mangoes. sof the stock was spoilt. 7 of the unspoilt mangoes were raw. Mala sold the remaining portion of unspoilt ripe mangoes.
 - (i) What fraction of the total stock of mangoes was unspoilt?
 - (ii) What fraction of the total stock of mangoes was sold? and solve and the little in the mangoes was sold?
 - (iii) There were 400 fruits in the stock that was bought. If Mala sold the unspoilt ripe mangoes at Rs. 10 per fruit, how much did she earn by selling the mangoes?
 - (iv)By selling the mangoes, Mala made 20% more than the amount she spent to buy the stock. Find the price at which she bought the stock of mangoes.
- 2. A sketch of a rectangular shaped netball court is given in the figure.
 - (i) Find the perimeter of the netball court.
 - (ii) Find its area.



 $\varepsilon = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$

- (iii) It is required to draw a semi-circular goal circle inside the court. The centre 'P' of the goal circle should be at the mid-point of AB. Further, the goal circle should meet AB at the two points which are 2.6m from A and B respectively. Draw a sketch of such a goal circle on the above figure and note down its radius.

 Alt you was a semi-circular goal circle inside the court. The centre 'P' of the goal circle should meet AB at the two points which are 2.6m from A and B respectively. Draw a sketch of such a goal circle on the above figure and note down its radius.
 - (iv) Two goal circles as mentioned in (iii) above are located on both sides of a netball court. If the centre player is not allowed to enter the goal circles, show that the area of the court in which she can move is 374.54 m^2 . (Take $\pi = 22/7$)
- 3. (a) A and B started a business by investing money in the ratio 4:5
 - (i) If A invested 20 000 rupees, how much did B invest? muminim and all tadW (i)
 - (ii) A profit of 6 000 rupees was made by the end of the year, 10% of which was reinvested in the business. If the remaining amount was divided between the two in the ratio that they invested in the business, find separately the amounts that A and B received.
 - (b) Sunil's father sent 340 Euro to Sunil who lives in Great Britain. What is its value in Sterling Pounds? (Take that 1 Euro equals 145 Sri Lankan rupees and that 1 Sterling Pound equals 170 Sri lankan rupees.)

- 4. (a) In a single player computer game, the player has to drive a motor car two rounds. In any round, either the player wins the round or loses it. The probability that a novice wins the first round is 1 notseup sint
- o (i) An incomplete tree diagram to represent this information is given below. Write down the corresponding probabilities on the branches men and blos alam. Were raw
 - fraction of the total stock of man attended the first round, the man at the total stock of man attended to the total stock of man attended to the total stock of the probability that he will win the second round and if he loses the first round, the probability that he will win the second round is $\frac{1}{4}$. Extend the above tree diagram to include the probabilities of win/lose of the second round and write down the corresponding probabilities on the branches.

(I) What fraction of the total stock of mangoes was unspoilt? 5 (iv)By selling the mangoes niws tock. Find the price lose sketch of a rectangular shaped netball court is

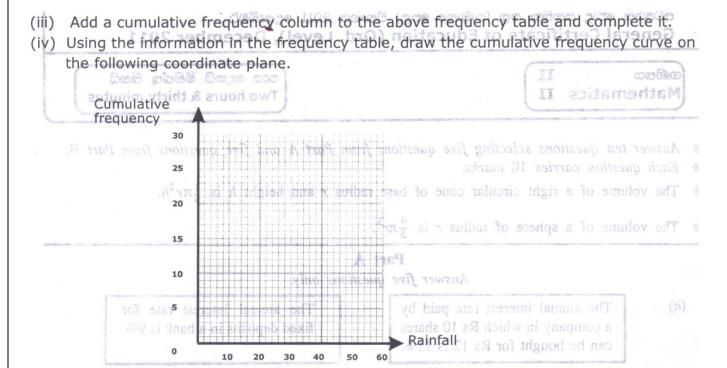
Find the probability that a novice.

- (iii) loses both rounds.
- (iv) wins exactly one round.
- (b) If $\varepsilon = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$
 - (iii) It is required to draw a semi-circular of that seel owt for sequired to draw a semi-circular of the semi-circular of the sequired to draw a sequired to draw a sequired to draw a semi-circular of the sequired to draw a sequired to dra
- B = {Prime numbers less than 10} of the at the additional series and series are the series and series are the s write down the set (A U B)' by listing its elements.
- circle on the above figure and note down its radius. 5. The rainfall values in millilitres at a certain location, collected during 30 days by the meteorological department are given below. (iii) woled new goal circles as mentioned in (iii). Woled new goal circles as mentioned in (iii).

10	w342	29 45	50 23 9	32ne	s not allowed26
					an move is 328.
		60			
39	29	47	29	43	55
37	35	ey86 the	n 41 g	nv 7 5in	35 szenisud a b

- (i) What is the minimum and the maximum rainfall received during the 30 days?
- (ii) An incomplete frequency table including tally marks, prepared for the above data is invested in the business. If the remaining analog this table in the

Class	Interval V Tally mark 223	Frequency	ו פנוט נוופנ נ	
(Rainf	fall mm)	(Number of days)	received	
10 -	20			
20 TIV	who lives in Great Britai 0.6	er sent 340 Euro to Sur	Sunil's fath	(d)
30 -	equals 145 Sri Lankan rupees	nds ? (Take that 1 Euro	Sterling Pou	
40 -	50 (.	ls 170 Sri lankan rupees	Pound equa	
50 -	60			



Anula invested Rs 60 000 to buy shares in the above company while Nimala opened a fixed

(v) Find the median rainfall during the period, according to the cumulative frequency curve

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