603 / SA1 / 13

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT (2022)

PRIMARY 6

MATHEMATICS

PAPER 1

Booklet A

Tuesday **10 May 2022** **1 h**

Name: _____ ( ) Class: 6.( )

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 Answer ALL questions.

4 Shade your answers in the Optical Answer Sheet (OAS) provided.

5 The use of calculators is <u>NOT</u> allowed.

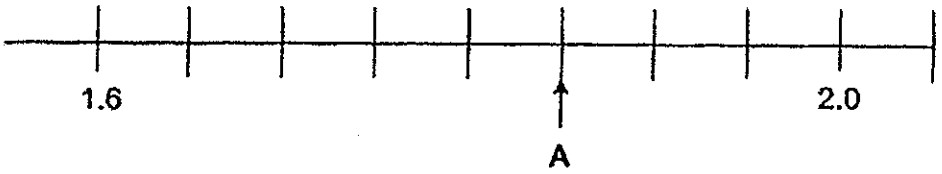
This question paper consists of 9 printed pages (inclusive of cover page).

Questions **1** to **10** carry **1** mark each. Questions **11** to **15** carry **2** marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (20 marks)

1. Which of the following is twenty thousand and ninety in numerals?

   1) 2 090
   2) 20 090
   3) 20 900
   4) 200 090

2. In the number line below, what is the value of the reading at A?



   1) 1.65
   2) 1.75
   3) 1.85
   4) 1.95

3. Which of the following is the same as 7090 cm?

   1) 7 m 9 cm
   2) 7 m 90 cm
   3) 70 m 9 cm
   4) 70 m 90 cm

4. A movie started at 1.45 p.m. and ended at 4.25 p.m. How long was the movie?

1) 2 h 20 min
2) 2 h 40 min
3) 3 h 20 min
4) 3 h 40 min

5. There are 56 tarts in a box. 24 of them are peach tarts while the rest are lemon tarts. What is the ratio of the number of lemon tarts to that of peach tarts in the box?

1) 3 : 4
2) 4 : 3
3) 3 : 7
4) 7 : 3

6. The sum of 4 numbers is 540. The average of the first 3 numbers is 86. What is the value of the fourth number?

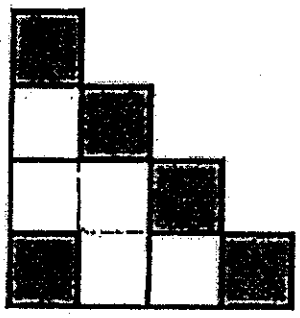
1) 49
2) 282
3) 291
4) 454

7. Which one of the following fractions is smaller than $\frac{3}{4}$?

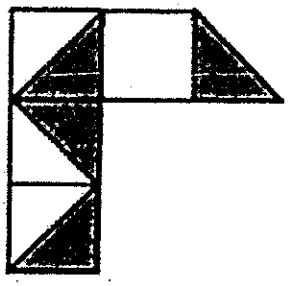
1) $\frac{4}{5}$
2) $\frac{7}{9}$
3) $\frac{9}{12}$
4) $\frac{15}{21}$

8. Which of the following shows $\frac{2}{5}$ of the figure shaded?

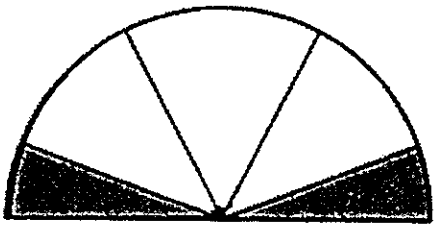
1)



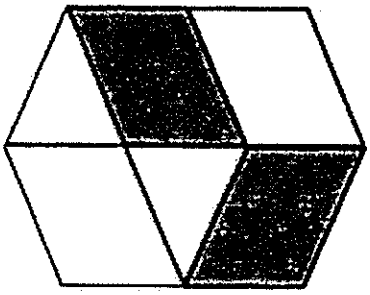
2)



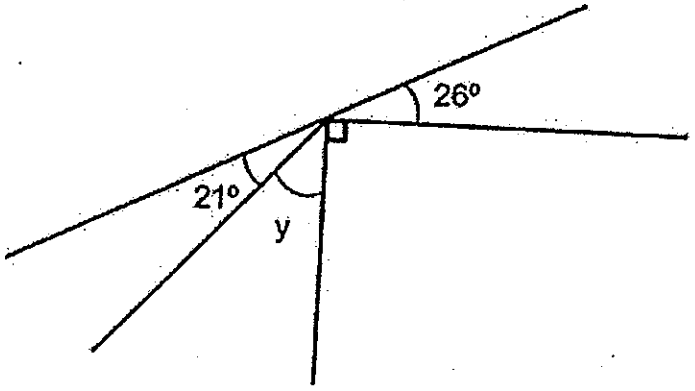
3)



4)

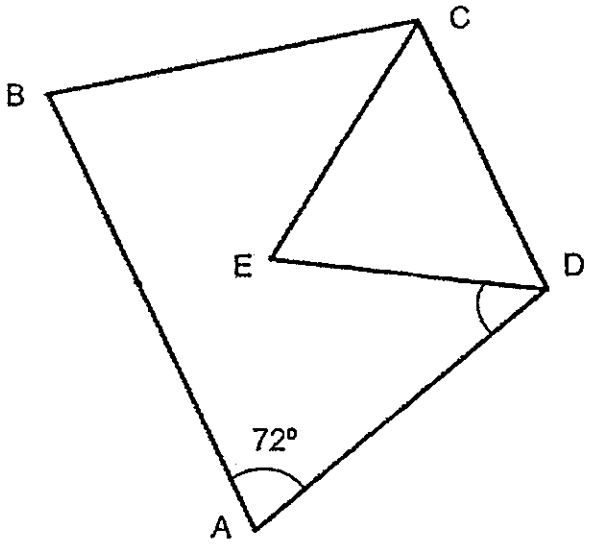


9. In the figure below, all lines are straight lines
Find ∠y.



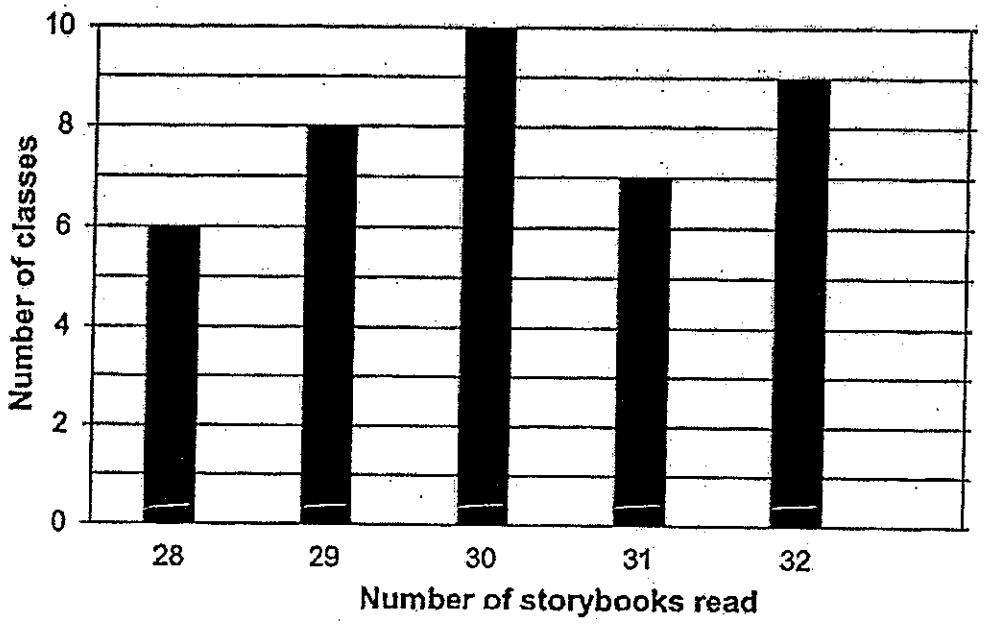
1) 43°
2) 47°
3) 64°
4) 67°

10. In the figure, CDE is an equilateral triangle. ABCD is a trapezium. AB is parallel to CD and ∠DAB = 72°. Find ∠ADE.



1) 48°
2) 60°
3) 63°
4) 72°

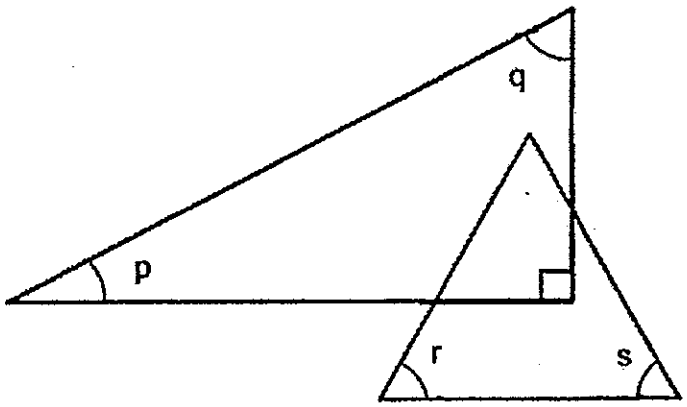
11. During a reading week, the number of books read by every classes of a school was recorded. The graph below shows the data collected.



Find the percentage of classes in the school which read 30 storybook. or more during the reading week?

1) 35%
2) 40%
3) 60%
4) 65%

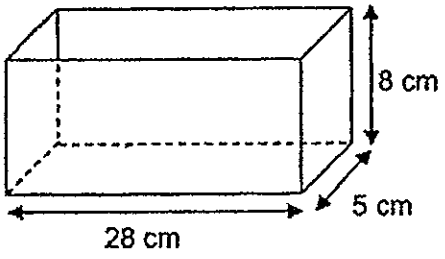
12. The figure below is made up of a right-angled triangle and an equilateral triangle.



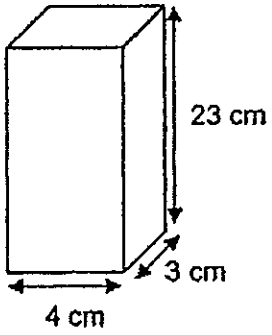
Which of the following is true?

1) $\angle p = \angle q = \angle r = \angle s$
2) $\angle p + \angle q$ is greater than $\angle r + \angle s$
3) $\angle p + \angle q + \angle r + \angle s = 150°$
4) $\angle p + \angle q + \angle r + \angle s = 210°$

13. Tank X was completely filled with water. Eddy poured the water from Tank X into Tank Y without spilling until Tank Y is filled to the brim. How much water was there left in Tank X?



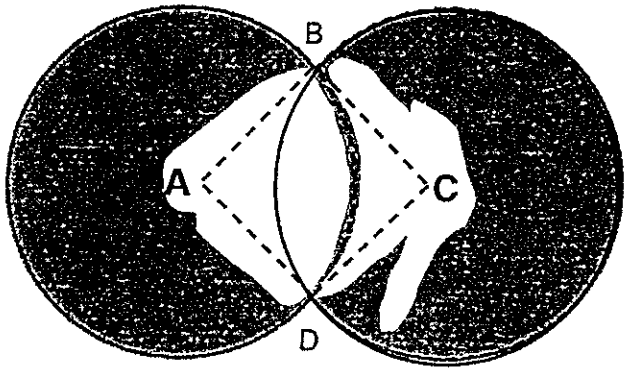
Tank X



Tank Y

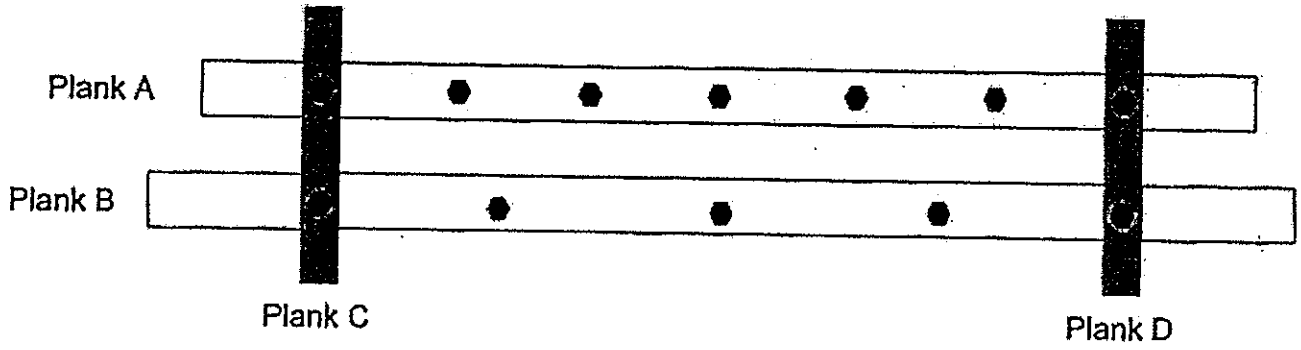
1) 276 cm^3
2) 844 cm^3
3) 856 cm^3
4) 904 cm^3

14. The shaded figure below is formed by two identical circles with centres at A and C. ABCD is a square and the length of AB is 14 cm. Find the perimeter of the shaded figure. (Take $\pi = \frac{22}{7}$)



1) 66 cm
2) 122 cm
3) 132 cm
4) 176 cm

15. Four planks A, B, C and D are nailed together to make a frame as shown below. The holes in Plank A and Plank B are evenly spread out such that Plank A and Plank B are divided into equal parts.



Plank B is 360 cm long. What is the length of Plank A?

1) 240 cm
2) 288 cm
3) 320 cm
4) 336 cm

End of Booklet A

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT (2022)

PRIMARY 6

MATHEMATICS

PAPER 1

Booklet B

Tuesday **10 May 2022** **1 h**

Name: _____ ( ) Class: 6.( )

INSTRUCTIONS TO PUPILS

1. Do not turn over the pages until you are told to do so.
2. Follow all instructions carefully.
3. Answer ALL questions.
4. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
5. Do not use correction fluid/tape or highlighter.
6. The use of calculators is NOT allowed.

This question paper consists of 10 printed pages (inclusive of cover page).

Sub-Total :

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.
(5 marks)

16. Find the value of $20.2 - 7.93$.

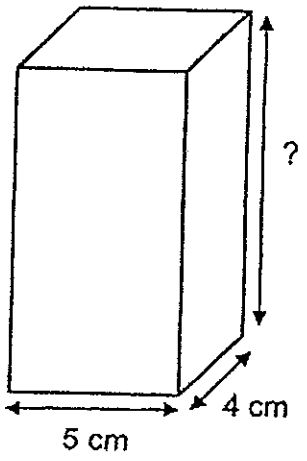
Ans : _____

17. $6 : 15 = \square : 40$

What is the missing number in the box?

Ans : _____

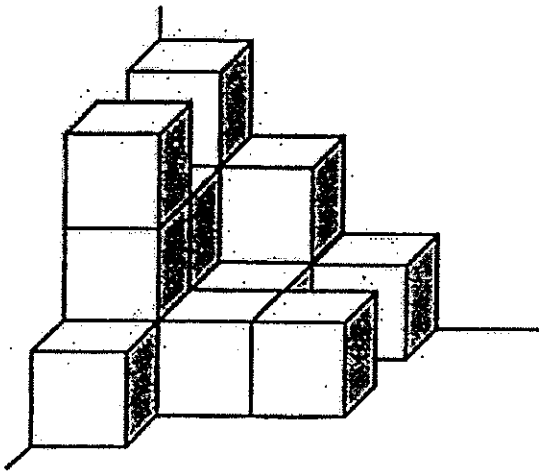
18. The figure below shows a cuboid with a volume of 240 cm^3. What is the height of the cuboid?



Ans : _____ cm

Sub-Total : ☐

19. The figure below is made up of 1-cm cubes. What is the volume of the figure?



Ans : _____ cm^3

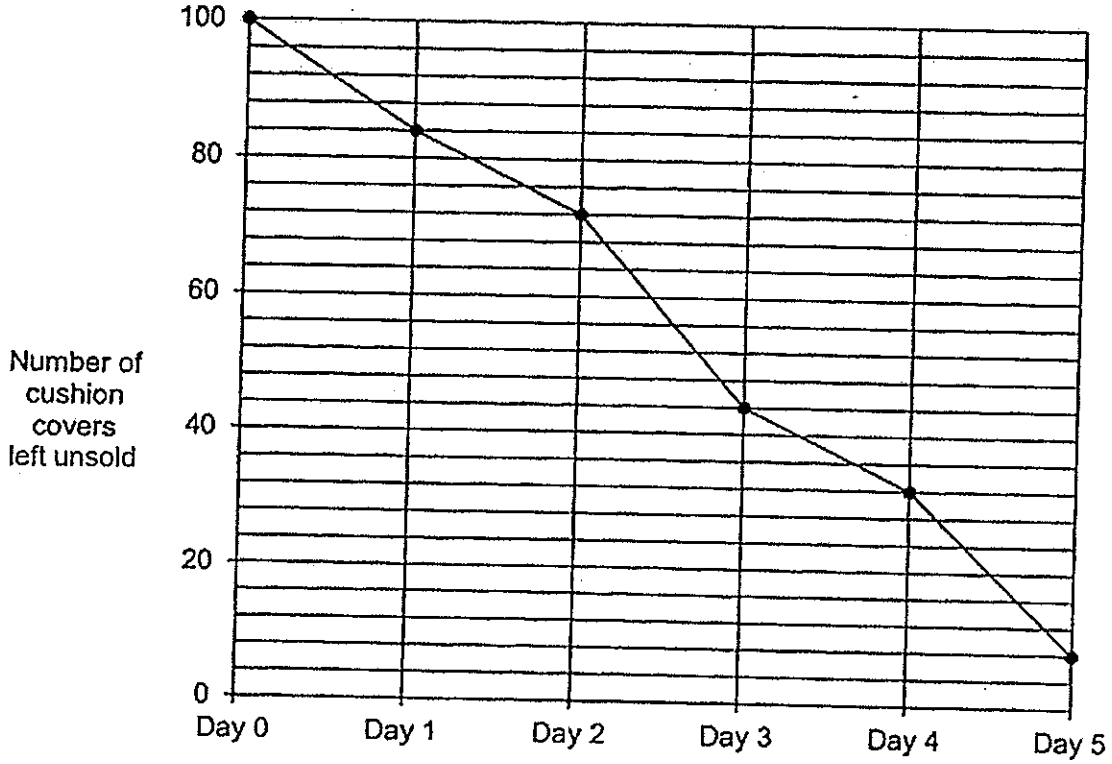
20. Kimmi paid $6 for 15 pencils. How much does each pencil cost?

Ans : $_____

Sub-Total :

Questions **21** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which requires units, give your answers in the units stated. (20 marks)

21. Mrs Lee made 100 cushion covers to sell at a 5-day carnival. The line graph shows the number of cushion covers left unsold at the end of each day.



(a) On which day was the most number of cushion covers sold?

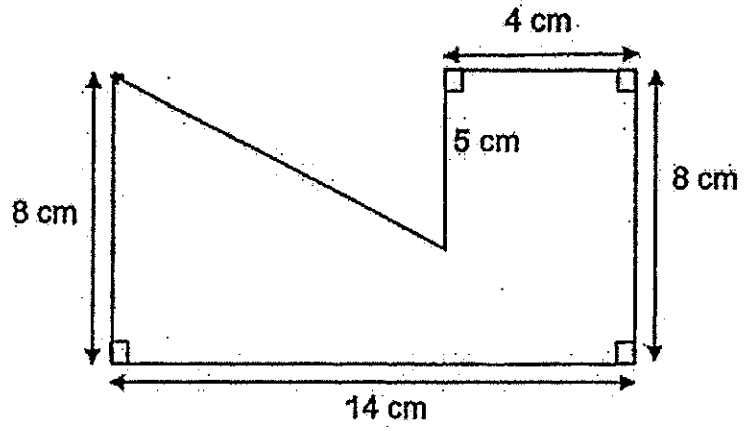
Ans : (a) Day _____

(b) What is the ratio of the number of cushion covers sold on Day 1 to the number of cushion sold on Day 5? Give your answer in the simplest form.

Ans : ((b) _____

Sub-Total :

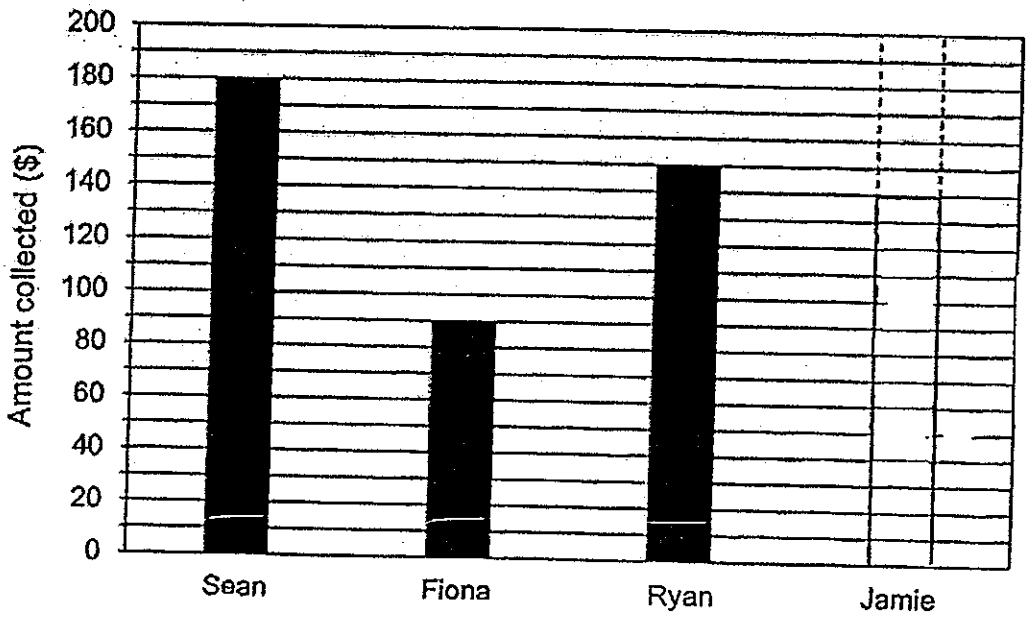
22. Find the area of the figure shown below.



Ans : _____ cm^2

Sub-Total :

23. The graph shows the amount of money collected by four children in a fundraising event. The bar that shows the amount collected by Jamie has not been drawn.



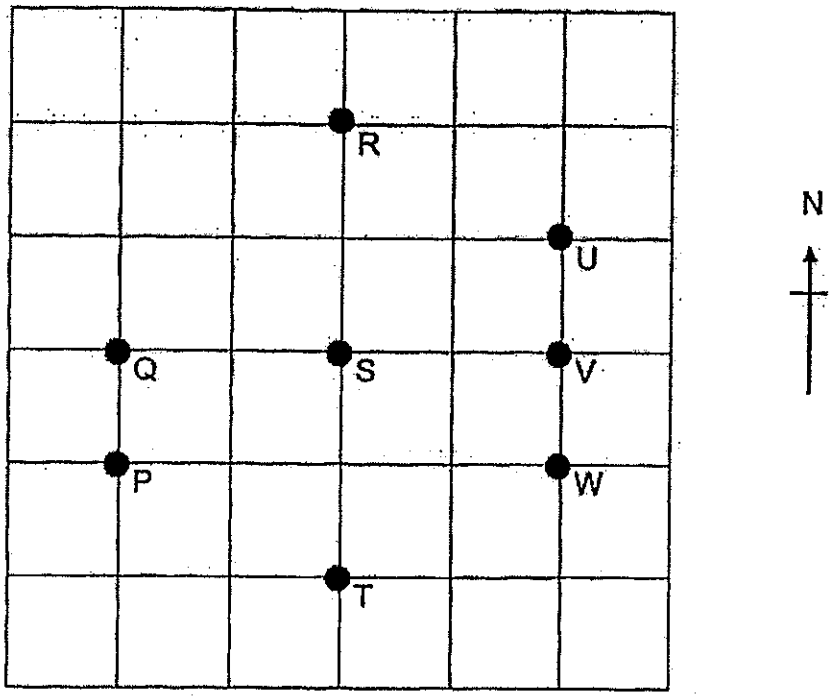
The amount of money collected by Jamie is equal to the average amount collected by the other three children. What is the amount collected by Jamie? **Draw this bar in the bar graph above.**

24. The average of three **different** 3-digit numbers is 140. Of the three numbers, find the largest possible number.

Ans : _____

Sub-Total : [ ]

25. Eight checkpoints on a map of a trail are shown in the square grid below.



(a) In which direction is T from Q?

Ans : (a) _____

(b) Ben is at one of the checkpoints. He is facing S. When he turns 90° clockwise, he faces U. Which checkpoint is Ben at?

Ans : (b) _____

Sub-Total : [ ]

26. The price of an admission ticket to a museum is $40. During Labour Day, a discount of 25% is given to all tickets and a further discount of $6 is given to senior citizens. What is the total percentage discount given to senior citizens on Labour Day?

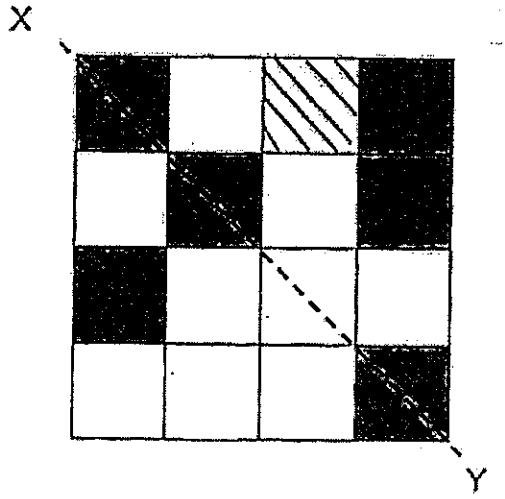
Ans : _____%

27. Chelsea was paid $2 for every watch she sold and an additional $5 for every 10 watches sold. How much would she receive for selling 70 watches?

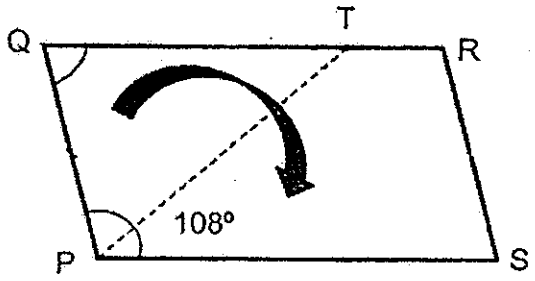
Ans : $ _____

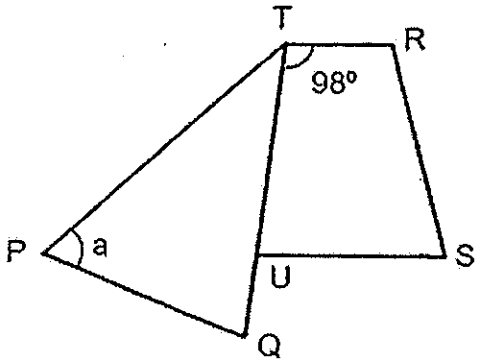
Sub-Total : [ ]

28. There are 6 shaded squares in the figure. Shade 3 more squares to form a symmetric figure with XY as the line of symmetry.



29. Jimin has a piece of paper shown below as parallelogram PQRS. He folded the paper along the line PT as shown below. ∠QPS = 108° and ∠ RTQ = 98°.





Find ∠a.

Ans: _____ °

Sub-Total :

30. Aziz had an equal number of blue and yellow clips at first. He gave away $\frac{1}{3}$ of his blue clips and some of his yellow clips. He then had $\frac{5}{12}$ of his clips left. What fraction of the yellow clips did Aziz give away?

Ans : _____

End of Booklet B

Sub-Total : [ ]

Anglo-Chinese School (Junior)

SEMESTRAL ASSESSMENT (2022)

PRIMARY 6

MATHEMATICS

PAPER 2

Tuesday 10 May 2022 1 h 30 min

Name: ______________________ ( ) Class: 6.( )

Parent's Signature:__________

INSTRUCTIONS TO PUPILS

1. Do not turn over the pages until you are told to do so.
2. Follow all instructions carefully.
3. Answer ALL questions.
4. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
5. Do not use correction fluid/tape or highlighter.
6. The use of an approved calculator is allowed.

Paper	Booklet	Possible Marks	Marks Obtained
1	A	20	
	B	25	
2		55	
Total		100	

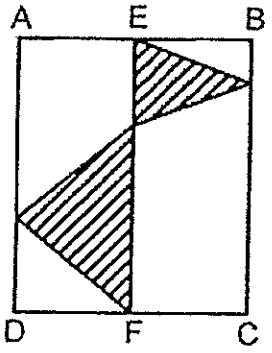
This question paper consists of 18 printed pages (inclusive of cover page).

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

1. Eddie, Freddy and Gary had 243 game tokens altogether. After Eddie gave $\frac{3}{10}$ of his tokens to Freddy and $\frac{1}{4}$ of his tokens to Gary, all three boys had the same number of tokens. How many tokens did Freddy and Gary have together at first?

Ans : _____

2. In the figure below, ABCD is a rectangle. EF is a straight line. AE = EB, DF = FC and the area of the shaded part is 58 cm^2. Find the area of rectangle ABCD.



Ans : _____ cm^2

Sub-Total :

3. The table below shows the number of watches sold at shop from Monday to Saturday. A total of 1300 watches were sold from Monday to Saturday.

Day	Mon	Tue	Wed	Thu	Fri	Sat
Number of watches sold	300	250	200	240	190	?

(a) How many watches were sold on Saturday?

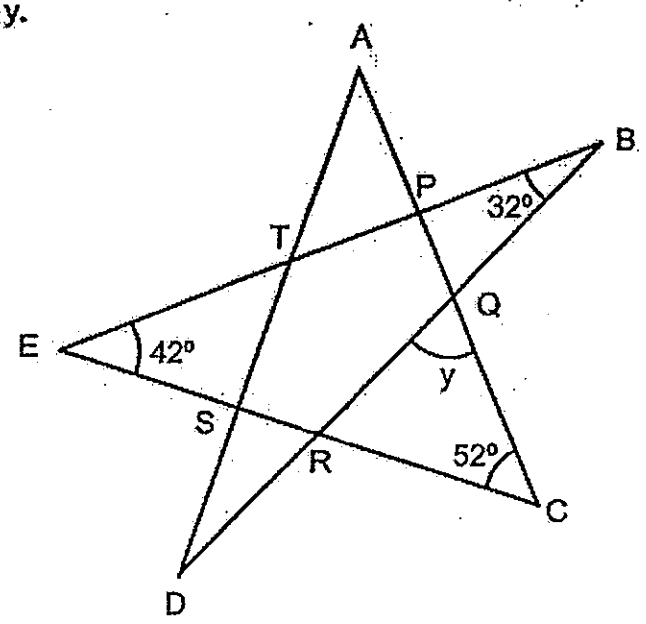
Ans : (a)_____

(b) In which 2-day interval was there a 20% decrease in the number of watches sold?

Ans: (b) From _____ to _____

Sub-Total :

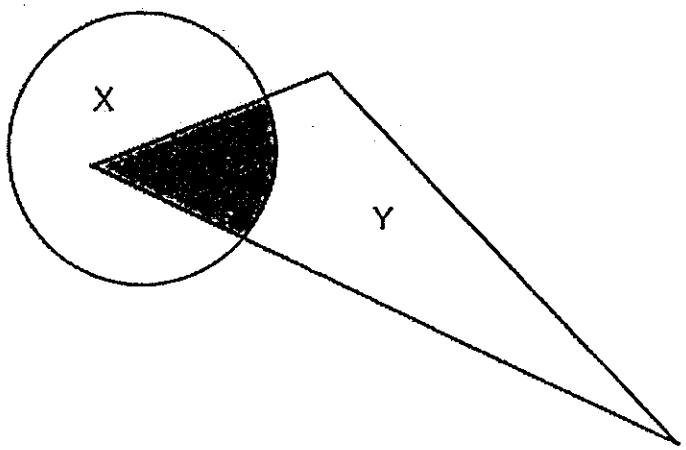
4. The figure is formed by five straight lines AC, AD, BD, BE and CE. Find $\angle y$.



Ans : _____ °

Sub-Total :

5. The figure below shows Circle X and Triangle Y that overlap each other. The ratio of the shaded area to the area of Circle X is 1 : 5. The ratio of the shaded area to the area of Triangle Y is 4 : 23 . What is the ratio of the shaded area to the total unshaded area in the figure? Give your answer in the simplest form.



Ans : _____

Sub-Total : [ ]

For questions 6 to 17, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

6. Sunita was given the task to make 200 friendship bands. She made 8 bands each day from Monday to Friday and 15 bands each day on Saturday and Sunday. Starting her task on a Thursday, on which day of the week did Sunita complete the task?

Ans : _____ [3]

Sub-Total :

7. The table shows the charges for booking of a tennis court at Kenhill Community Club.

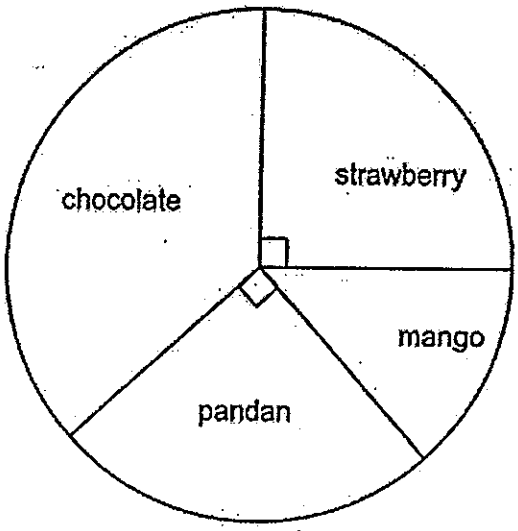
Time	Charge	Entrance Fee
8 a.m. to 10 p.m.	$2.50 per half hour	*Free for Members.* *$2 per guest.*

Kane, who is a club member, booked a tennis court from 4.30 p.m. to 7 p.m. to play tennis with 3 guests. How much will Kane need to pay?

Ans : _____ [3]

Sub-Total :

8. The pie chart shows the number of cakes baked by a baker.

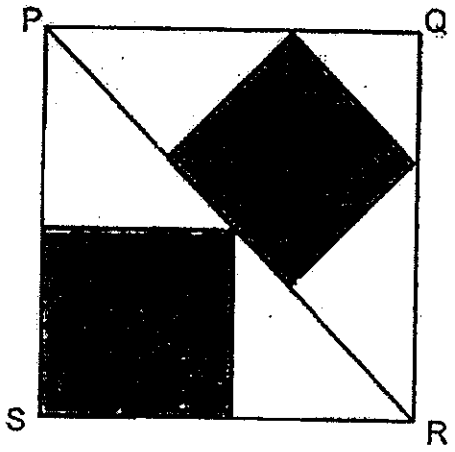


The baker baked a total of 120 strawberry and mango cakes. The number of mango cakes is 42 fewer than the number of pandan cakes. How many chocolate cakes did he bake?

Ans : _____ [4]

Sub-Total :

9. PQRS is a square with an area of 216 cm^2. The shaded parts are made up of two different squares. Find the total area of the shaded parts.

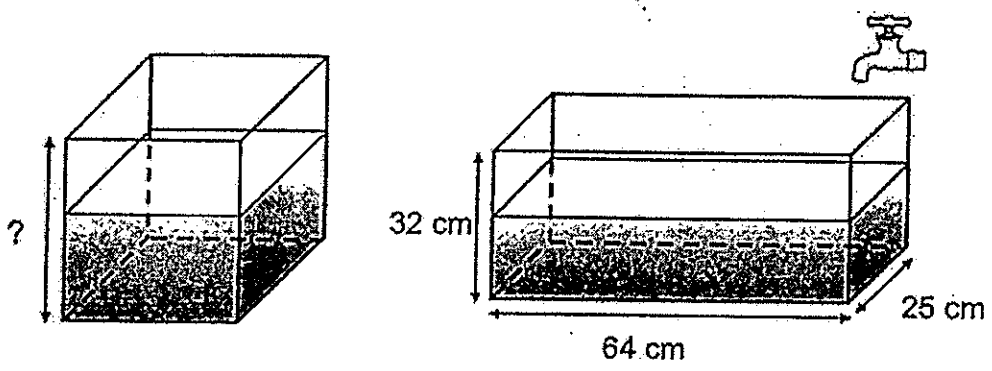


Ans : _____ [3]

Sub-Total :

10. A cubical tank was $\frac{3}{5}$ filled with water. All its water was then transferred into a rectangular tank, 64 cm by 25 cm by 32 cm, filling 75% of it. Next, water from a tap was turned on to fill the rectangular tank to its brim at a rate of 1.6 litres per min.

(a) What was the height of the cubical tank?



Cubical Tank

Rectangular Tank

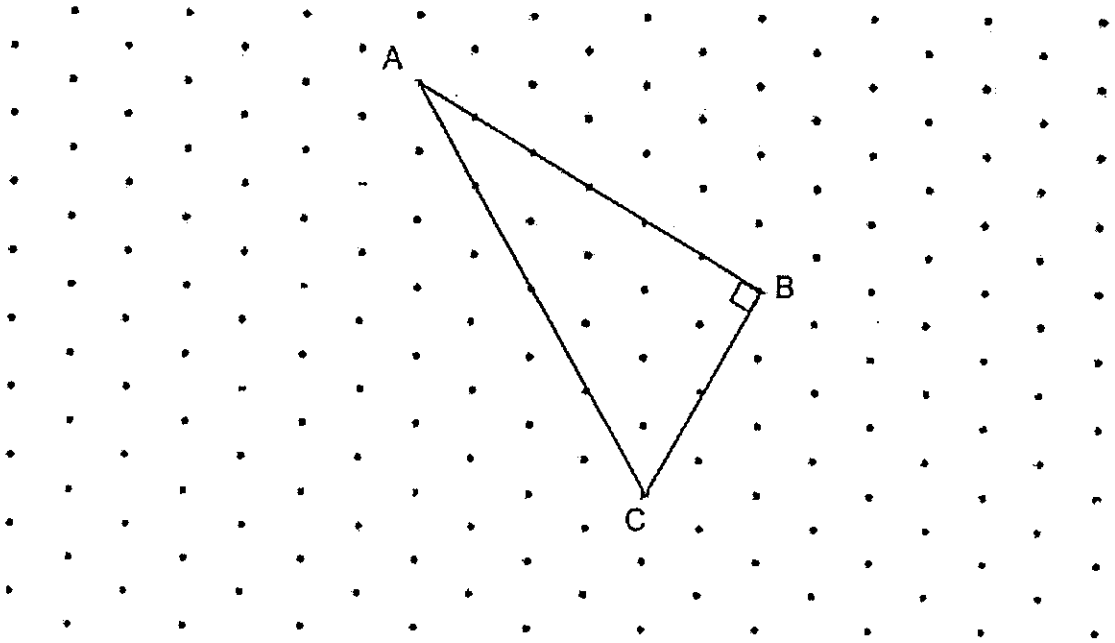
Ans : (a)_____ [3]

(b) How long did it take to fill the rectangular tank to its brim?

Ans : (b)_____ [1]

Sub-Total :

11. The figure below shows a right-angled triangle, ABC, drawn on a grid.



(a) ACX is an equilateral triangle. Draw triangle ACX on the grid such that ACX does not overlap with triangle ABC. [1]

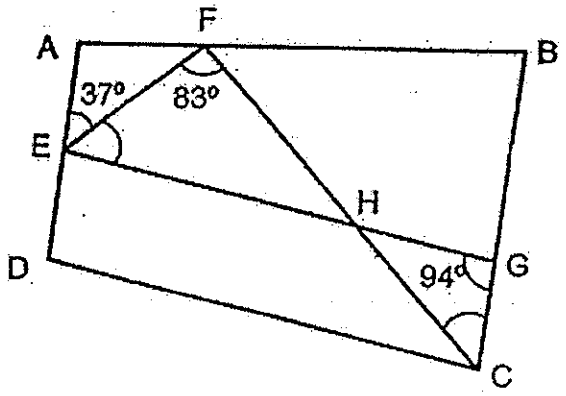
(b) BCY is an right-angled triangle. Its area is $\frac{1}{2}$ the area of triangle ABC. Draw BCY on the grid such that it does not overlap with triangle ABC. [1]

(c) Find the ratio of the area of triangle ACX to the area of triangle BCY.

Ans : (c) _____ [1]

Sub-Total :

12. In the figure below, ABCD is a trapezium. AD // BC. The points E, F and G lie on the trapezium ABCD. FHC and EHG are straight lines. $\angle AEF = 37°$, $\angle EFH = 83°$ and $\angle HGC = 94°$.



(a) Find $\angle FEG$.

Ans : (a)_____ [2]

(b) Find $\angle HCG$.

Ans : (b)_____ [2]

Sub-Total :

13. Gopal wanted to buy a pair of footwear. He saw a pair of running shoes on sale at 20% discount and a pair of sneakers at 25% discount. Both pairs of shoes had the same original price before the discount.

To buy the pair of running shoes, Gopal would need $8.50 more than what he had. So, he bought the pair of sneakers instead. After that, he had $3 left.

(a) What was the original price of the pair of running shoes?

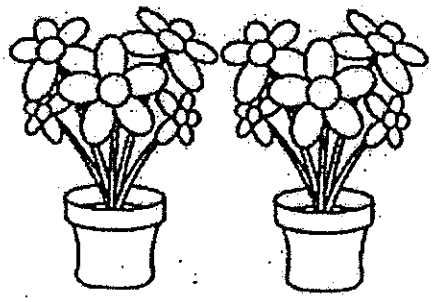
Ans : (a) _____ [2]

(b) How much money did Gopal have at first?

Ans : (b) _____ [2]

Sub-Total :

14. Bin Jin bought pots of flowers at the prices shown below.

Large pots	Small pots
	
2 for $25	3 for $10

Bin Jin bought an equal number of large pots of flowers and small pots of flowers. She spent $165 more on the large ones. What fraction of the total amount spent was on the small pots?

Ans : _____ [3]

Sub-Total :

15. Yusoff uses sticks to form figures that follow a pattern. The first four figures are shown below.

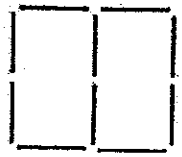


Figure 1

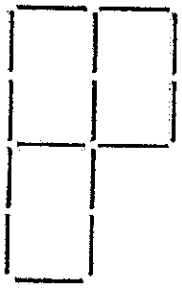


Figure 2

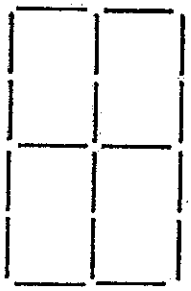


Figure 3

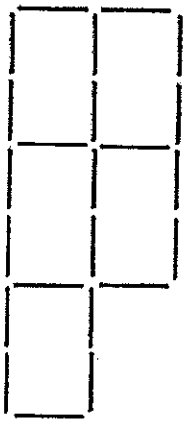


Figure 4

(a) The table below shows the number of sticks used for each figure. Complete the table for Figure 5 and Figure 6. [1]

Figure Number	Number of sticks used
1	10
2	15
3	18
4	23
5	
6	

(b) What is the difference in the number of sticks Yusoff will use for Figure 10 and Figure 12?

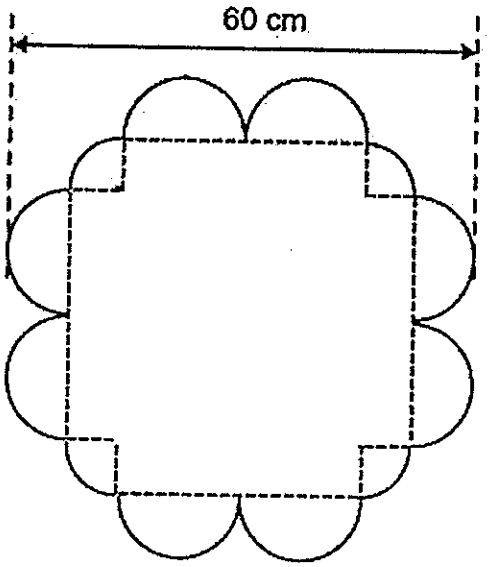
Ans : (b)_____ [1]

(c) Following the pattern, Yusoff uses 151 sticks to form a figure. What is the Figure Number?

Ans: (c)_____ [2]

Sub-Total :

16. The figure below shows a placemat. The outside edge of the placemat is formed by 8 identical semicircles and 4 identical quarter circles. The radius of each semicircle is 8 cm. The length of the whole placemat is 60 cm.



Find the area of the placemat. Take $\pi = 3.14$.

Ans : _____ [5]

Sub-Total :

17. Chef Ramsy used $\frac{1}{4}$ of a bag of flour to make some muffins and twice as many cupcakes. The amount of flour he used for each muffin was 3 times as much as each cupcake. Chef Ramsy used $\frac{5}{6}$ of the remaining bag of flour on a cake. He used 256.5 g more flour on the cake than the muffins.

(a) What fraction of the bag of flour was used on the muffins?

Ans : (a)_____ [1]

(b) How much flour was there in the bag at first?

Ans : (b)_____ [4]

End of Paper 2

Sub-Total :

SCHOOL : ACS PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2022 SA1

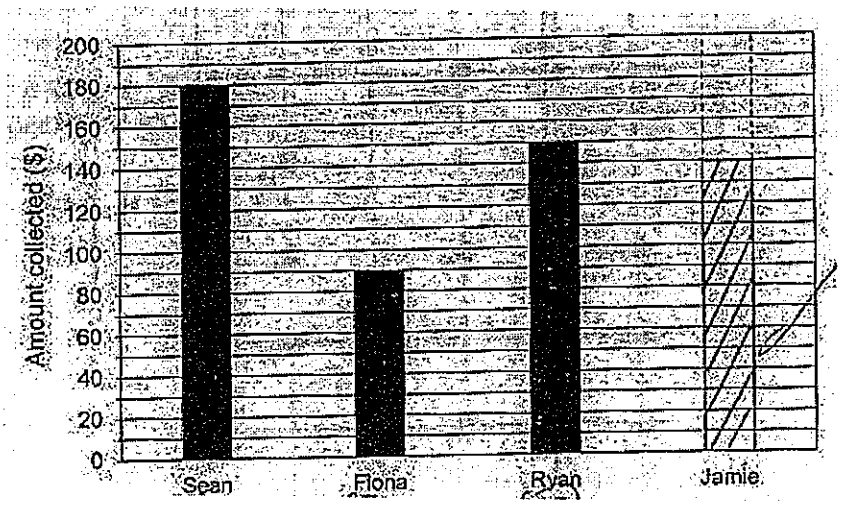
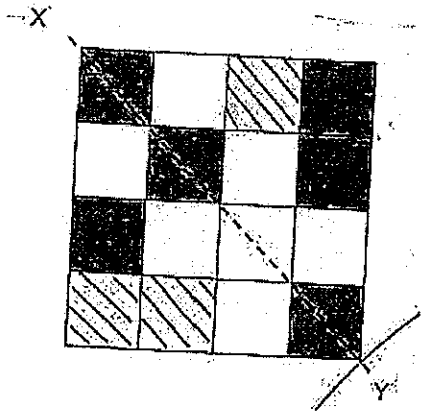
PAPER 1 BOOKLET A

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	4	2	2	2	4	4	1	1

Q 11	Q12	Q13	Q14	Q15
4	4	2	3	3

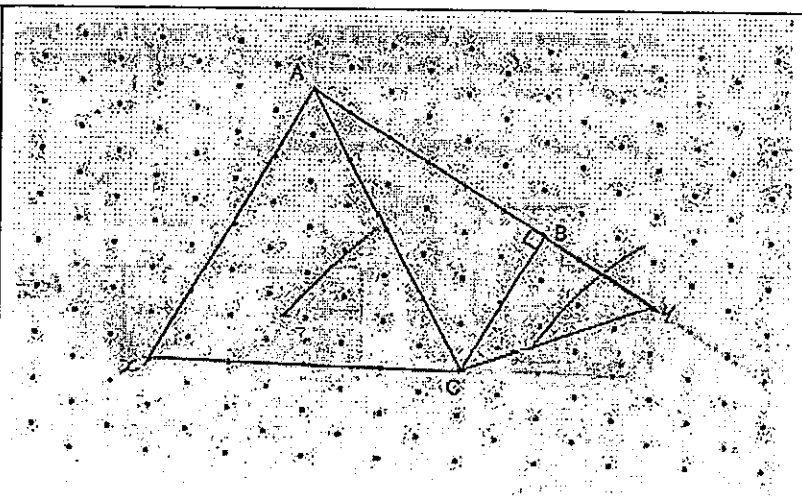
PAPER 1 BOOKLET B

Q16)	12.27
Q17)	16
Q18)	12 cm
Q19)	15 cm3
Q20)	$0.40
Q21)	a) Day 3 b) 2 : 3
Q22)	87 cm

Q23)	
Q24)	219
Q25)	a) South – East b) V
Q26)	40%
Q27)	$175
Q28)	
Q29)	67°
Q30)	$\frac{5}{6}$

PAPER 2

Q1)	63
Q2)	58 x 2 = 116 116 x 2 = 232 cm2
Q3)	a)1300 – 300 – 250 – 200 – 240 – 190 = 1000 – 250 – 200 – 240 – 190 = 750 – 200 – 240 – 190 = 550 – 240 – 190 = 120 b)Tue to Wed
Q4)	<y = 180° – 74° – 52° = 54°
Q5)	4 : 35
Q6)	Tuesday
Q7)	5 x 2.5 = 12.5 12.5 + 6 = $18.50
Q8)	Mango→ (120 – 42) ÷ 2 = 39 S →39 + 42 = 81 81 x 2 = 162 162 → C + M C → 162 – 39 = 123
Q9)	102 cm2
Q10)	a) 40 cm b) 8 min

Q11)	 c) 4 : 1
Q12)	a)57° b)46°
Q13)	a)$230 b)$175.50
Q14)	$\frac{4}{19}$
Q15)	a)26 , 31 b)8 c)36
Q16)	2708.88 cm2
Q17)	a) $\frac{3}{20}$ b)540 g

END