

**RAFFLES GIRLS' PRIMARY SCHOOL
PRACTICE PAPER
MATHEMATICS (PAPER 1)
PRIMARY 6**

Name: _____ ()

Form Class: P6 _____

Math Teacher : _____

Date: 17 June 2020

Duration : 1 hour

Your Paper 1 Score (Out of 45 marks)	
Your Paper 2 Score (Out of 55 marks)	
Your Total Score (Out of 100 marks)	
Parent's Signature	

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. **NO** calculator is allowed for this paper.

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). Shade your answer (1, 2, 3 or 4) on the OAS provided.
All diagrams are not drawn to scale. [20 marks]

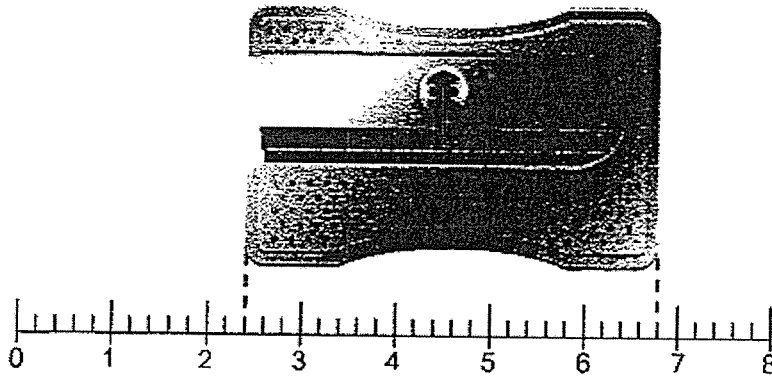
1. What is the smallest possible odd number that can be formed with the following digits?



- (1) 20 387
(2) 20 378
(3) 20 837
(4) 20 738
2. Express $7\frac{5}{8}$ as an improper fraction.
- (1) $\frac{61}{8}$
(2) $\frac{51}{8}$
(3) $\frac{47}{8}$
(4) $\frac{43}{8}$
3. Express $\frac{13}{8}$ as a decimal.

- (1) 1.58
(2) 1.625
(3) 13.8
(4) 16.25

4. What is the length of the pencil sharpener?



- (1) 4.2 cm
- (2) 4.4 cm
- (3) 6.4 cm
- (4) 6.8 cm

5. Arrange the following numbers from the smallest to the largest.

64.78	64.8	64.087
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Smallest

Largest

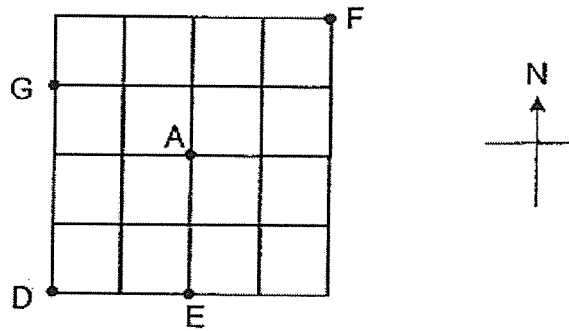
- (1) 64.8 , 64.78 , 64.087
- (2) 64.78 , 64.087 , 64.8
- (3) 64.087 , 64.78 , 64.8
- (4) 64.087 , 64.8 , 64.78

6. Which one of the following fractions is bigger than $\frac{5}{8}$?

- (1) $\frac{1}{2}$
- (2) $\frac{2}{3}$
- (3) $\frac{3}{7}$
- (4) $\frac{7}{15}$

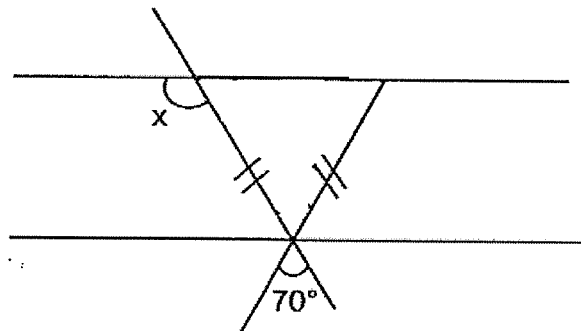
7. In a class, $\frac{1}{3}$ of the pupils are boys. $\frac{2}{3}$ of the boys wear spectacles.
What is the ratio of the total number of girls to the number of boys who wear spectacles?
- (1) 1 : 1
(2) 1 : 3
(3) 3 : 1
(4) 2 : 9
8. A survey was conducted among 80 pupils to find out their favourite pop groups. 25 pupils chose Black Pink, 45 pupils chose EXO and the rest chose BTS. Express the number of pupils who chose BTS as a percentage of those who chose Black Pink.
- (1) 12.5%
(2) 40%
(3) 60%
(4) 87.5%
9. Tom was paid $\$(\frac{19d-12}{4})$ for his work where d was the number of orders he delivered. If Tom delivered 20 orders, how much was he paid?
- (1) \$38
(2) \$92
(3) \$95
(4) \$368

10. Which point is south-west of A?



- (1) D
- (2) E
- (3) F
- (4) G

11. Find $\angle x$.



- (1) 55°
- (2) 70°
- (3) 110°
- (4) 125°

12. To make some fruit punch, Mrs Tan mixed 600 ml of orange juice with 1.4l of guava juice. How much orange juice would Mrs Tan use if she needed 10l of fruit punch?

- (1) 5l
- (2) 6l
- (3) 3l
- (4) 7l

13. Mr Tan earns \$3000 a month. He saves $\frac{1}{10}$ of it and spends 30% of it on food.

He spends 20% of the remaining amount on transport and gives the rest to his mother. How much does he spend on transport every month?

- (1) \$300
- (2) \$360
- (3) \$540
- (4) \$600

14. Su-Lynn wanted to buy 9 boxes of blueberries but she was short of \$10.90. In the end she bought 5 boxes of blueberries and had \$3.30 left. How much did Su-Lynn spend on the blueberries?

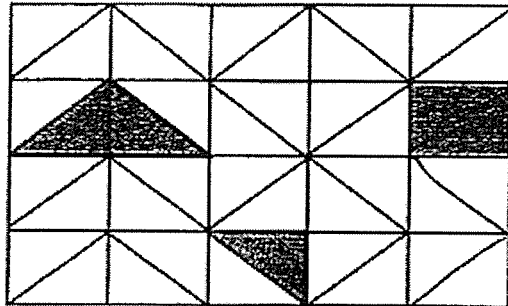
- (1) \$9.50
- (2) \$17.10
- (3) \$17.75
- (4) \$31.95

15. Luanne bought two carton boxes. The volume of the small carton box was 2700 cm^3 . The length, breadth and height of the large carton box were twice as long as those of the small carton box. What was the volume of the large carton box?

- (1) 5400 cm^3
- (2) $10\,800 \text{ cm}^3$
- (3) $16\,200 \text{ cm}^3$
- (4) $21\,600 \text{ cm}^3$

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. All diagrams
are not drawn to scale. [5 marks]

16. How many more triangles must be shaded so that $\frac{3}{4}$ of the figure is shaded?



Ans: _____

17. Find the value of 750×80 .

Ans: _____

18. Find the value of $18 + (30 - 6 \div 3) \times 20$.

Ans: _____

19. Find the value of $6 \div 4 \times \frac{1}{4}$.

Ans: _____

20. Chee Seong took an overnight train to his hometown. The train left the station at 21 45 and arrived 8 h 50 min later. What time did Chee Seong arrive at his hometown? Give your answer in 24-hour clock.

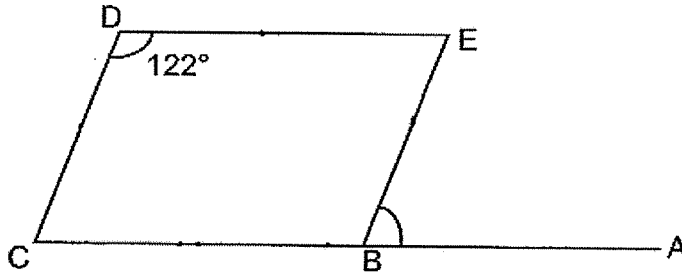
Ans: _____

Questions 21 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. [20 marks]

21. The cost of printing 200 name stickers is \$16. What is the cost of printing one name sticker?

Ans: \$ _____

22. BCDE is a parallelogram. CBA is a straight line. Find $\angle EBA$.



Ans: _____^o

23. The average mass of 20 parcels is 2 kg 56 g. What is the total mass of the parcels?

Ans: _____ kg

24. 3 chefs worked together to bake 1200 cupcakes in 8 hours. How long will 5 chefs work together to bake the same number of cupcakes?

Ans: _____ h

25. Sharon has y sweets. Later in the day, she bought twice as many sweets. After she gave away 25 sweets, she shared the remaining sweets with her two sisters. How many sweets did each sister receive? Leave your answer in terms of y .

Ans: _____

26. The table shows Aini's scores for her mid-year examination.

Subject	Score
English	?
Math	85
Science	?
Malay	97

The average score of all the subjects was 72. What was the average score of English and Science?

Ans: _____

27. Germaine bought some scented candles and tubes of hand lotion from a shop during the Christmas special offer.

Christmas Special Offer!



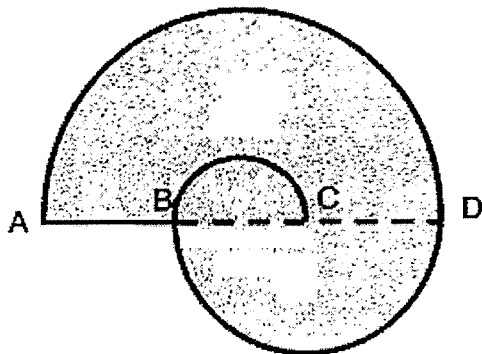
Scented Candles Hand Lotion

6 for \$10 **4 for \$35**

She spent an equal amount of money on the scented candles and tubes of hand lotion. What was the least number of scented candles Germaine bought from the shop?

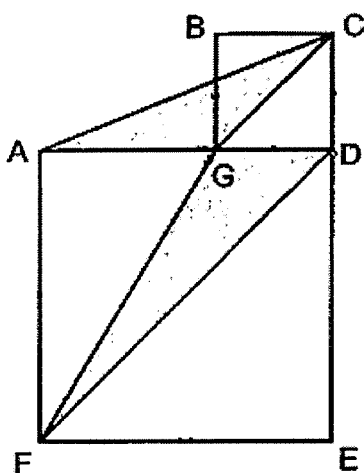
Ans: _____

28. Julian designed a logo with three semicircles and a straight line as shown. AD was 60 cm. $AB = BC = CD$. What was the area of the logo?
Take $\pi = 3.14$



Ans: _____ cm²

29. The figure is made up of square BCDG, square ADEF and two shaded triangles. The areas of the small square and the big square are 16 cm² and 100 cm² respectively. What is the shaded area of the figure?



Ans: _____ cm²

30. Mrs Tan wants to buy a new handbag. Shop A sells the handbag at 20% more than Shop B. Shop C sells the same handbag at 25% more than Shop A.
- (a) If Mrs Tan wants to spend the least amount of money, which shop should she buy the handbag from?
- (b) What is the percentage increase in the amount of money that Mrs Tan has to pay if she buys the bag from Shop C instead of Shop B?

Ans: a) _____ [1]

b) _____ % [1]

End of Paper
© Please check your work carefully ©



RAFFLES GIRLS' PRIMARY SCHOOL
PRACTICE PAPER
MATHEMATICS (PAPER 2)
PRIMARY 6

Name: _____ ()

Form class: P6 _____

Math Teacher : _____

Date: 17 June 2020

Duration: 1 h 30 min

INSTRUCTIONS TO CANDIDATES

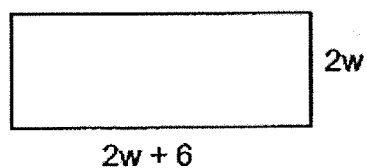
1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. [10 marks]

1. John and Ravi had 288 marbles altogether. John had 120 marbles. What fraction of John's marbles was Ravi's marbles? Give your answer in the simplest form.

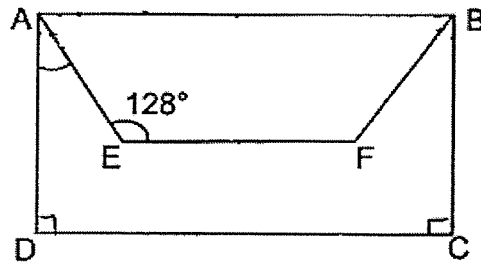
Ans : _____

2. The perimeter of the rectangle is 220 cm. Find the breadth of the rectangle.



Ans : _____ cm

3. ABCD is a rectangle and ABFE is a trapezium. Find $\angle DAE$.



Ans : _____°

4. Hafiz was 35.1 kg heavier than his brother two years ago. After Hafiz put on 13.8 kg and his brother put on 6.4 kg, Hafiz is now twice as heavy as his brother. What was his brother's mass two years ago?

Ans: _____ kg

5. Sharon had a box of red, blue and green marbles. $\frac{3}{7}$ of the marbles were red. There were more green marbles than blue marbles.

Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a (✓) to indicate your answer.

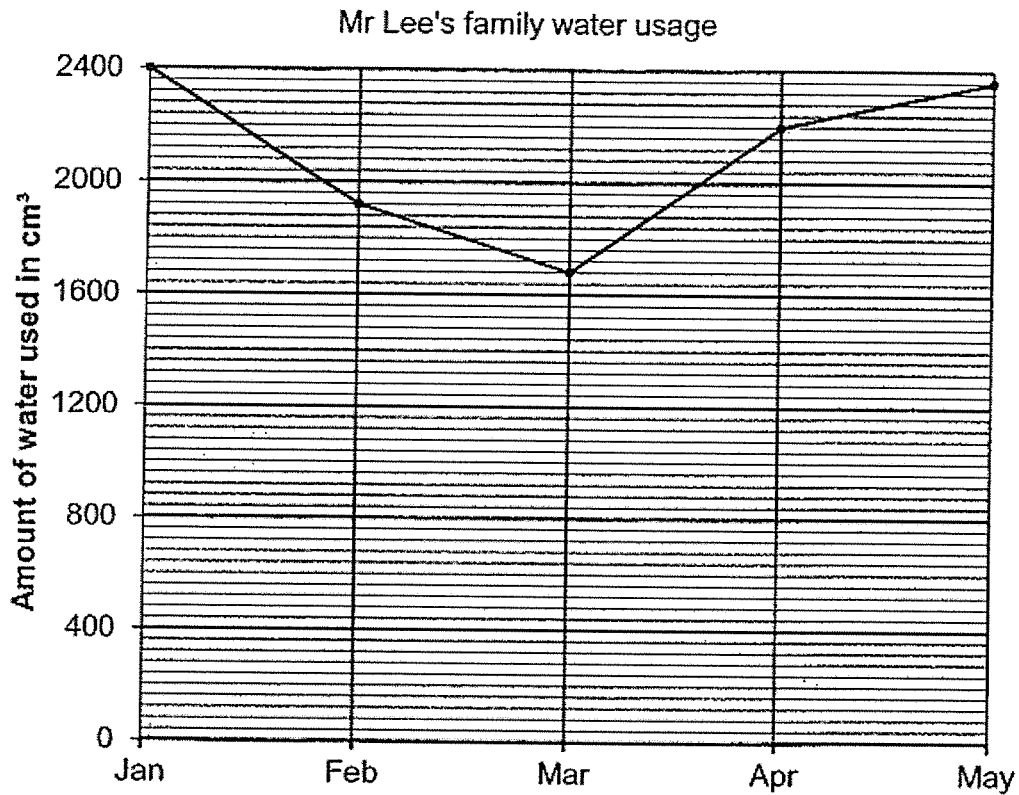
Statement	True	False	Impossible to tell
a) $\frac{5}{7}$ of the marbles were green.			
b) There were more red marbles than green marbles.			
c) After Sharon bought more red marbles, the fraction of marbles that were blue decreased.			

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

All diagrams are not drawn to scale.

[45 marks]

6. The chart shows the water usage of Mr Lee's family over a few months.



- (a) Between which 2 consecutive months was there the greatest increase in water usage?
- (b) Find the percentage decrease in the water usage from January to March.

Ans: (a) _____ and _____ [1]

(b) _____ [2]

7. The following table shows the carpark charges at Moontec Shopping Mall.

	Weekday	Weekend
First hour	\$2.20	\$1.10
Subsequent half hour or part thereof	\$1.30	\$0.60
After 6 p.m. per entry	\$2.50	\$3.50

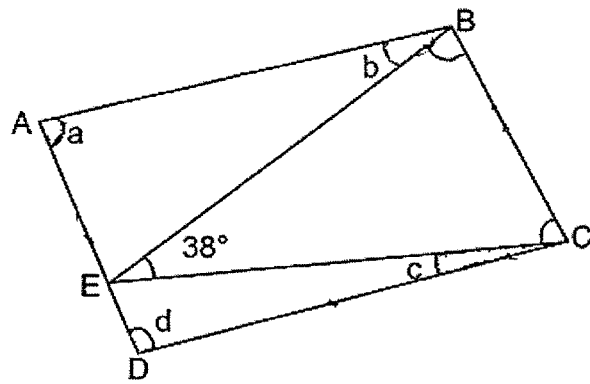
(a) Mr Tan entered the mall at 5.30 p.m. and left the mall at 7 p.m. on Tuesday.
How much did Mr Tan pay for parking?

(b) Mr Lee and his family visited the mall on Saturday and stayed there from 3 p.m. to 9.15 p.m. Since they spent more than \$100 at the mall, they received a \$3 parking rebate from the mall. How much did they pay for parking in the end?

Ans: (a) _____ [1]

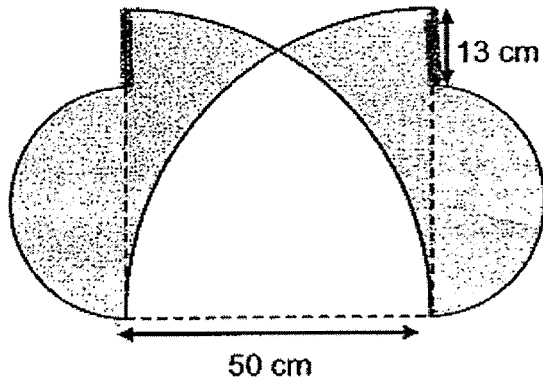
(b) _____ [3]

8. ABCD is a parallelogram. Find the sum of $\angle a + \angle b + \angle c + \angle d$.



Ans : _____ [3]

9. The figure is made up of 2 identical quarter circles of radius 50 cm, 2 identical semicircles and 2 straight lines. Find the perimeter of the shaded figure.
 Take $\pi = 3.14$

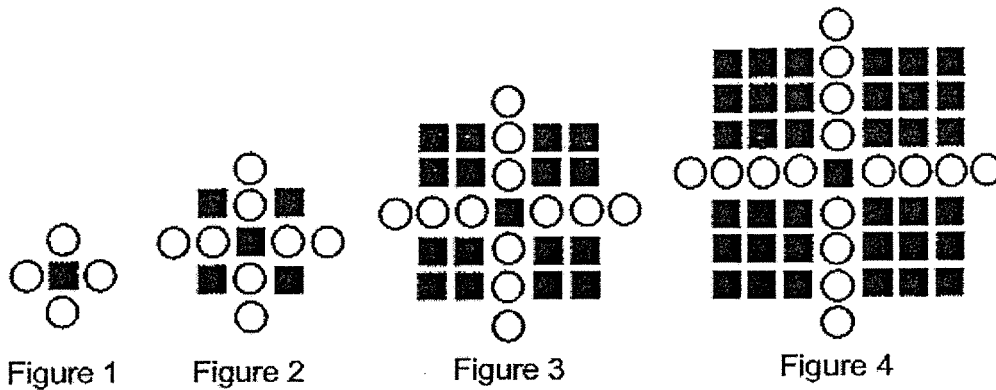


Ans : _____ [3]

10. Kelly and Hanah went out for an evening with \$116.80 and \$70.90 respectively. They shared the cost of the dinner and taxi fare equally. The dinner cost 3 times as much as the taxi fare. In the end, Kelly was left with 4 times as much money as Hanah. How much did they pay for the dinner altogether?

Ans: _____ [3]

11. Circles and squares are used to form figures that follow a pattern as shown below.



(a) The table shows the number of circles and squares for the first four figures. Complete the table for Figure 5.

Figure Number	1	2	3	4	5
Number of circles	4	8	12	16	
Number of squares	1	5	17	37	

[1]

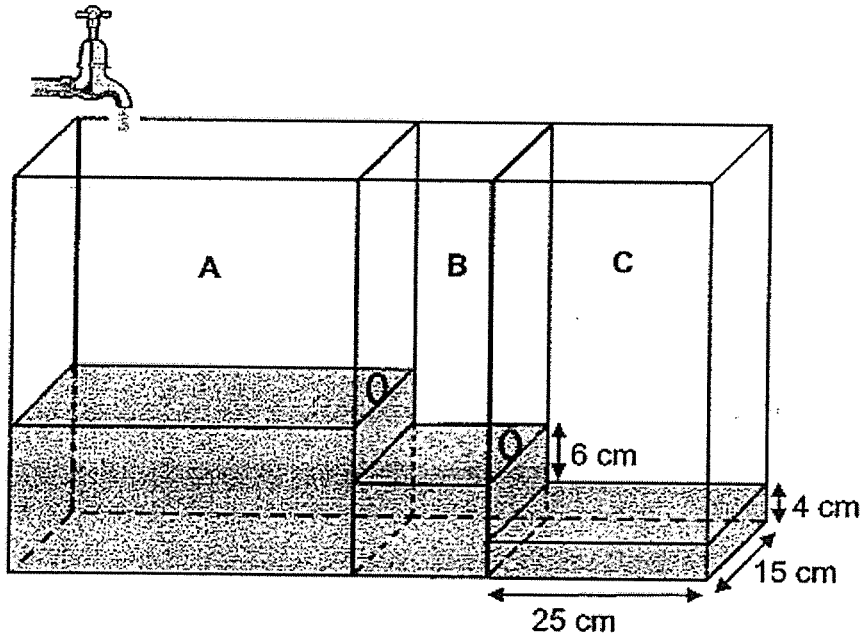
(b) A figure has a total of 100 circles. What is the total number of squares in this figure?

Ans : b) _____ [2]

12. A rectangular tank has 3 compartments separated by two partitions each with a hole in them. Compartment B has a square base.

When a tap is turned on for 15 min, water flows into Compartment A at a rate of 0.93ℓ per min. The water in Compartment A overflows into Compartment B through the hole in the partition between them. As water fills up in Compartment B, it overflows into Compartment C through the hole in the partition between them. After the tap is turned off, the water level in Compartment C is 4 cm. The water level in Compartment B is 6 cm higher than that in Compartment C.

What is the volume of water in Compartment A in the end?



Ans: _____ [4]

13. Chris had some black and white balls in a box. First, he added 98 white balls and as a result, 40% of the balls were black. Next, he added another 240 white balls and the number of black balls decreased by 25%.

(a) What percentage of the balls were white in the end?

(b) How many white balls did he have at first?

Ans: (a) _____ [2]

(b) _____ [2]

14. Terry had $\frac{4}{7}$ as many stamps as Jason Terry had 3 times as many stamps as Sam. Jason and Terry gave some stamps to Sam in the ratio of 3 : 2. As a result, Sam had 6 times as many stamps as before. In the end, Sam had 198 more stamps than the total number of stamps Jason and Terry had.

(a) What was the ratio of Sam's number of stamps to Terry's number of stamps to Jason number of stamps at first?

(b) How many stamps did Jason have in the end?

Ans : (a) _____ [2]

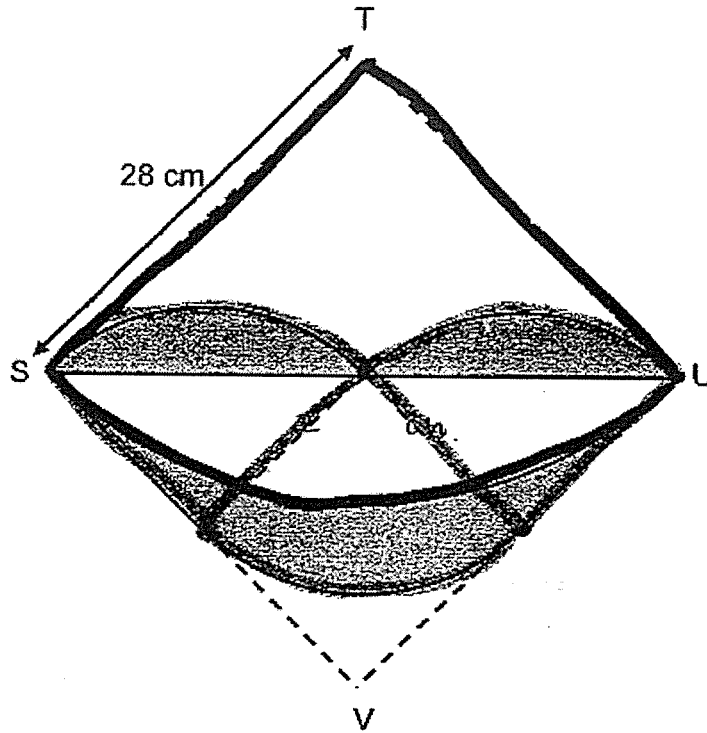
(b) _____ [3]

15. An electronic shop sold $\frac{3}{5}$ as many laptops as tablets. Each laptop cost \$243 more than a tablet. The shop collected \$2524 more from the sale of laptops than the sale of tablets. The total amount collected from the sales of laptops and tablets was \$19 064. How many tablets did the shop sell?

Ans: _____ [5]

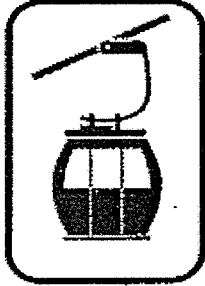
16. The figure shows 3 identical small quarter circles, a big quarter circle enclosed within square STUV of sides 28 cm. Find the area of the shaded parts.

Take $\pi = \frac{22}{7}$



Ans: _____ [4]

17.

	CABLE CAR TICKETS
	<u>Ticket Price</u> Adult - \$32 Child - \$18

On a public holiday, the number of child tickets sold was 180 more than the number of adult tickets. The amount of money collected from the sale of adult tickets was \$2752 more than the sale of child tickets. What was the total amount of money collected from the sale of adult tickets? Round your answer to the nearest thousand dollars.

Ans: _____ [4]

End of Paper
Please check your work carefully ☺

Q21)	$16 \div 2 \div 100$ $= 8 \div 100$ $= \$0.08$								
Q22)	$\angle EBC = \angle ECD = 122^\circ$ $\angle EBA = 180^\circ - 122^\circ = 58^\circ$								
Q23)	$2\text{kg } 56\text{g} = 2000\text{g} + 56\text{g} = 2056\text{g}$ Total mass $\rightarrow 20 \times 2056\text{g} = 41120\text{g} = 41.120\text{kg}$								
Q24)	<table border="1"> <thead> <tr> <th></th> <th>time taken</th> </tr> </thead> <tbody> <tr> <td>30 \rightarrow 1200 cupcakes</td> <td>8h</td> </tr> <tr> <td>1c \rightarrow 1200 cupcakes</td> <td>$3 \times 8\text{h} = 24\text{h}$</td> </tr> <tr> <td>5c \rightarrow 1200 cupcakes</td> <td>$24\text{h} \div 5 = 4.8\text{h}$</td> </tr> </tbody> </table>		time taken	30 \rightarrow 1200 cupcakes	8h	1c \rightarrow 1200 cupcakes	$3 \times 8\text{h} = 24\text{h}$	5c \rightarrow 1200 cupcakes	$24\text{h} \div 5 = 4.8\text{h}$
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1c \rightarrow 1200 cupcakes	$3 \times 8\text{h} = 24\text{h}$								
5c \rightarrow 1200 cupcakes	$24\text{h} \div 5 = 4.8\text{h}$								
Q25)	bought $\rightarrow 2x + y = 2y$ after buying $\rightarrow y + 2y = 3y$ after giving away $\rightarrow 3y - 25$ each sister $\rightarrow \left(\frac{3y-25}{3}\right)$ sweet								
Q26)	Total score of all sub $\rightarrow 4 \times 72 = 288$ Total score of EL and SC $\rightarrow 288 - (85 + 97) = 288 - 182 = 106$ Avg score of EL and SC $\rightarrow 106 \div 2 = 53$								
Q27)	LCM of 10 and 35 = 70 SC = 6 for \$10 \rightarrow 42 for \$70 HL = 4 for \$35 \rightarrow 8 for \$70 ANS: 42								
Q28)	2041cm ²								
Q29)	$CD \rightarrow \sqrt{16} = 4$ $DE \rightarrow \sqrt{100} = 10$ $AG \rightarrow 10\text{cm} - 4\text{cm} = 6\text{cm}$ $\triangle X \rightarrow \frac{1}{2} \times 6 \times 4 = 12$ $\triangle Y \rightarrow \frac{1}{2} \times 4 \times 10 = 20$ $12\text{cm}^2 + 20\text{cm}^2 = 32\text{cm}^2$								
Q30)	a)shop B b)50%								

PAPER 2

Q1)	$R \rightarrow 288 - 120 = 168$ $\frac{R}{J} = \frac{168}{120} = \frac{7}{5}$
Q2)	$4 \times 2w + 6 + 6 = 8w + 12 = 220$ $8w \rightarrow 220 - 12 = 208$ $2w \rightarrow 208 \div 4 = 52\text{cm}$
Q3)	$\angle BAE \rightarrow 180 - 128 = 52^\circ$ $\angle DAE \rightarrow 90 - 52 = 38^\circ$
Q4)	$1u \rightarrow 35.1 - 6.4 + 13.8 = 42.5$ B years ago $\rightarrow 42.5 - 6.4 = 36.1\text{kg}$
Q5)	a)False b)Impossible c)True
Q6)	a)March and April b) $2400 - 1680 = 720$ $\% \downarrow \frac{720}{2400} \times 100\% = 30\%$
Q7)	a) $5.30 \text{ --- } 6\text{pm} \rightarrow \2.20 After 6pm $\rightarrow \$2.50 \text{ per entry}$ Total = $\$2.20 + \$2.50 = \$4.70$ b)\$4
Q8)	$\angle a + \angle d = 180^\circ$ $\angle x + \angle y = 180^\circ - 38^\circ = 142^\circ$ $\angle b + \angle c = 180^\circ - 142^\circ = 38^\circ$ $\angle a + \angle b + \angle c + \angle d = 180^\circ + 38^\circ = 218^\circ$
Q9)	$1 \text{ big semi} \rightarrow \frac{1}{2} \times \pi \times 50 = 50\pi$ Diameter of 1 small semi $\rightarrow 50 - 13 = 37$ $1 \text{ small circle} \rightarrow \pi \times 37 = 37\pi$ Peri of shaded $\rightarrow 50\pi + 37\pi + 13 + 13$ $= 87\pi + 26 = 299.18\text{cm}$
Q10)	$3p = \$116.80 - \$70.90 = \$45.90$ Hanah's money left (1p) = $\$45.90 \div 3 = \15.30 Dinner + taxi each paid (4u) = $\$70.90 - \$15.30 = \$55.60$ $1u = \$55.60 \div 4 = \13.90 Total for dinner (6u) = $6 \times \$13.90 = \83.40

Q11)	<p>a) circle--- 20 / squares--- 65</p> <p>b) figure no $\rightarrow 100 \div 4 = 25$ $25 - 1 = 24$ $24 \times 24 \times 4 + 1 = 2305$</p>																
Q12)	<p>Total water in A + B + C $\rightarrow 15 \times 0.93\ell = 13.95\ell = 13950\text{cm}^3$</p> <p>Total water in C $\rightarrow 25\text{cm} \times 15\text{cm} \times 4\text{cm} = 1500\text{cm}^3$</p> <p>Total water in B $\rightarrow 15\text{cm} \times 15\text{cm} \times (6\text{cm} + 4\text{cm}) = 2250\text{cm}^3$</p> <p>Total water in A $\rightarrow 13950\text{cm}^3 - 1500\text{cm}^3 - 2250\text{cm}^3 = 10200\text{cm}^3$</p>																
Q13)	<p>a) black end --- $\frac{75}{100} \times 40\% = 30\%$</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">after adding 89w</td> <td style="text-align: center;">after adding 240w</td> </tr> <tr> <td style="text-align: center;">B : W</td> <td style="text-align: center;">30 : 70</td> </tr> <tr> <td style="text-align: center;">40 : 60</td> <td style="text-align: center;">120 : 280</td> </tr> <tr> <td style="text-align: center;">120 : 180</td> <td></td> </tr> </table> <p>W end ---- $\frac{280}{280+120} \times 100\% = 70\%$</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">b) After adding 98W</td> <td style="text-align: center;">After adding another 240W</td> </tr> <tr> <td style="text-align: center;">W : B</td> <td style="text-align: center;">70 : 30</td> </tr> <tr> <td style="text-align: center;">60 : 40</td> <td style="text-align: center;">28 : 12</td> </tr> <tr> <td style="text-align: center;">18 : 12</td> <td></td> </tr> </table> <p>$28u - 18u = 10u = 240$ $1u - 240 \div 10 = 24$ $18u = 18 \times 24 = 432$ W at first = $432 - 98 = 334$</p>	after adding 89w	after adding 240w	B : W	30 : 70	40 : 60	120 : 280	120 : 180		b) After adding 98W	After adding another 240W	W : B	70 : 30	60 : 40	28 : 12	18 : 12	
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Q14)	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">a) T : J</td> <td style="text-align: center;">T : S</td> </tr> <tr> <td style="text-align: center;">4 : 7</td> <td style="text-align: center;">3 : 1</td> </tr> <tr> <td style="text-align: center;">12 : 21</td> <td style="text-align: center;">12 : 4</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">S : T : J</td> </tr> <tr> <td style="text-align: center;">4 : 12 : 21</td> </tr> </table>	a) T : J	T : S	4 : 7	3 : 1	12 : 21	12 : 4	S : T : J	4 : 12 : 21								
a) T : J	T : S																
4 : 7	3 : 1																
12 : 21	12 : 4																
S : T : J																	
4 : 12 : 21																	

	<p>b) s end $\rightarrow 4u \times 6 = 24u$ s received $\rightarrow 24u - 4u = 20u = 5p$ $1p \rightarrow 20u \div 5 = 4u$ J end $\rightarrow 21u - (3 \times 4u) = 9u$ T end $\rightarrow 12u - (2 \times 4u) = 4u$ $24u - (9u + 4u) = 11u = 198$ $1u \rightarrow 198 \div 11 = 18$ J end $\rightarrow 9u$ $= 9 \times 18 = 162$</p>
Q15)	<p>$2u = \\$19064 - \\$2524 = \\$16540$ $1u \rightarrow \\$16540 \div 2 = \\8270 (\$ from T) Money from L $\rightarrow \\$8270 + \\$2524 = \\$10794$ Value of 1 for L $\rightarrow \\$10794 \div 3 = \\3598 Value of 1 for T $= \\$8270 \div 5 = \\1654 Diff in value of 1u $\rightarrow \\$3598 - \\$1654 = \\$1944$ No.item in each unit $\rightarrow \\$1944 \div \\$243 = 8$ No.of sold $\rightarrow 8 \times 5 = 40$</p>
Q16)	<p>radius of 1 quadrant $\rightarrow 28\text{cm} \div 2 = 14\text{cm}$ area of big quadrant $\rightarrow \frac{1}{4} \times \frac{22}{7} \times 28 \times 28 = 616$ area of unshaded hump $\rightarrow 616 - (\frac{1}{2} \times 28 \times 28) = 224$ 3 small quad $\rightarrow \frac{3}{4} \times \frac{22}{7} \times 14 \times 14 = 462$ Shaded parts $\rightarrow 462\text{cm}^2 - 224\text{cm}^2 = 238\text{cm}^2$</p>
Q17)	<p>No.of A tickets $= \\$5992 \div \\$14 = 428$ Amt collected from A $\rightarrow 428 \times \\$32 = \\$13696 \approx \\14000</p>

