SA1

Paper 1 (Booklet A)



Rosyth School Mid-Year Examination 2021 Mathematics Paper 1 Primary 6

-	Section	Maximum Mark	Marks Obtained
5.	Answer all questions.		
4.	You are <u>not</u> allowed to us	se a calculator.	
3.	Shade your answers in th	e Optical Answer Sheet (OA:	S) provided.
	Follow all instructions can	•	
	Do not open this booklet u	-	
	structions to Pupils:		
		Booklet A	
T	otal Time for Booklets	A and B : 1 hour	
	Pate: 10 May 2021	Parent's Sign	ature:
C	dass: Pr 6	•	
ı	lame:	Register No	

20

^{*}This booklet consists of 9 pages (including this cover page). This paper is not to be feproduced in part or whole without the permission of the Principal.

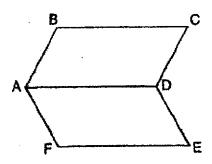
Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

All diagrams in this paper are not drawn to scale unless stated otherwise.

(20 marks)

- There are 17 985 people at a concert.
 Round this number to the nearest hundred.
 - (1) 17 000
 - (2) 17 900
 - (3) 17 990
 - (4) 18 000
- 2. Mdm Ling bought 2 litres of orange juice. She poured all the juice into smaller bottles of $\frac{1}{4}\ell$ each. How many of such bottles will there be in the end?
 - (1) 6
 - (2) 2
 - (3) 8
 - (4) 4

3. In the figure, ABCD and ADEF are parallelograms. Which of the following pairs of lines are parallel?



- (1) BC and DE
- (2) BC and FE
- (3) AB and AD
- (4) AB and AF
- 4. Express $\frac{7}{9}$ as a decimal. Round your answer to 2 decimal places.
 - (1) 0.77
 - (2) 0.78
 - (3) 1.28
 - (4) 1.29

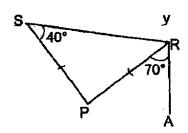
5. The table below shows the number of library books borrowed by some pupils on a particular day.

Number of books borrowed	0	1	2	3	4
Number of pupils	6	8	10	12	4

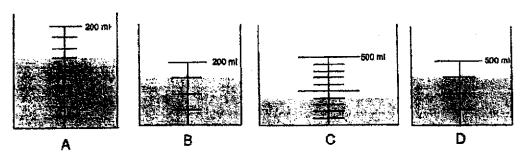
How many pupils borrowed at least 2 library books?

- (1) 10
- (2) 16
- (3) 22
- (4) 26
- 6. Simplify the algebraic equation 5w + 6 2w + 11 9 w.
 - (1) 2w + 8
 - (2) 3w + 2
 - (3) 7w + 8
 - (4) 8w + 26
- 7. There are 28 blue marbles and 52 red marbles in a box. What is the ratio of the number of blue to red marbles in the box?
 - (1) 2:3
 - (2) 4:13
 - (3) 7:26
 - (4) 7:13

8. In the figure below, PRS is an isosceles triangle and PR = PS. ∠PSR = 40° and ∠PRA = 70°. Find ∠y.



- (1) 150°
- (2) 250°
- (3) 290°
- (4) 320°
- 9. Four containers with some water are shown below. Which container has the least amount of water?



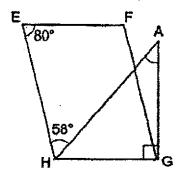
- (1) A
- (2) B
- (3) C
- (4) D

10. Arrange the following fractions from the largest to the smallest.

$$\frac{2}{11}$$
, $\frac{1}{5}$ $\frac{2}{9}$

- (1) $\frac{1}{5}$, $\frac{2}{9}$, $\frac{2}{11}$
- (2) $\frac{2}{9}$, $\frac{1}{6}$, $\frac{2}{11}$
- (3) $\frac{2}{11}$, $\frac{1}{5}$, $\frac{2}{9}$
- (4) $\frac{2}{11}$, $\frac{2}{9}$, $\frac{1}{5}$

11. The figure below is made up of a paralleogram EFGH and a right-angled triangle AGH. Find ∠GAH.



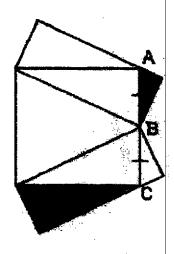
- (1) 42°
- (2) 48°
- (3) 58°
- (4) 80°

12. At a post office, the overseas postage rates for bulk parcels are shown in the table below. Mr Tan posted a parcel which weighs 5.8 kg to Malaysia and another parcel which weighs 7.2 kg to Hong Kong. How much did he pay for sending both parcels?

Destinations	Postal Rate		
(Zone)	First 5 kg	Additional kg or part thereof	
Zone A: Maiaysia	\$16	\$3	
Zone 8: Brunel, Hong Kong, Indonesia, Philippines, Talwan and Thailand	\$ 30	\$6	

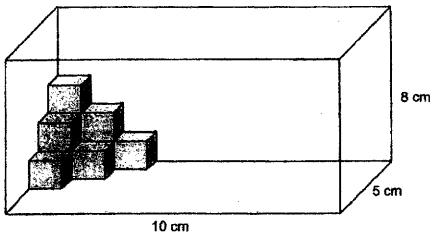
- (1) \$46
- (2) \$54
- (3) \$59
- (4) \$64

13. The figure is made up of a square and 2 identical rectangles placed overlapping the square. The length AB is equal to the length BC. The area of the shaded parts is 64 cm². What is the area of the unshaded parts?



- (1) 128 cm²
- (2) 256 cm²
- (3) 320 cm²
- (4) 384 cm²

14. An open rectangular box contains some 1-cm cubes as shown below. How many more 1-cm cubes are needed to fill the box completely?



- (1) 390
- (2) 391
- (3) 394
- (4) 400
- 15. Liling made some puffs. $\frac{2}{3}$ of them were serdine puffs and the rest were curry puffs. After giving away 35 sardine puffs and $\frac{1}{2}$ of the curry puffs, she had $\frac{1}{4}$ of the puffs left. How many puffs had Liling left?
 - (1) 5
 - (2) 15
 - (3) 45
 - (4) 60



Rosyth School Mid-Year Examination 2021 Mathematics Primary 6

Name:	_ Registe	r No.
Class: Pr 6 Group:	<u>,</u>	
Date: 10 May 2021	Parent's Signature:	
Total Time for Booklets A and B: 1 hour		
PAPER 1		

(BOOKLET B)

Instructions to Pupils:

- 1. Do not open this booklet until you are told to do so.
- 2. Follow all instructions carefully.
- 3. You are not allowed to use a calculator.
- 4. Write your answers in the booklet.
- 5. Answer all questions.

Section	Maximum Mark	Marks Obt	ained
Paper 1 (Booklet B)	25		

^{*} This booklet consists of **9** pages (including this cover page)

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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.

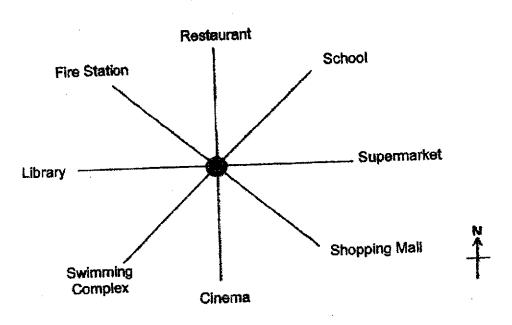
Do not write in this space

All diagrams in this paper are not drawn to scale unless stated otherwise. (5 marks)

16. Mrs Ramesh bought a packet of sweets for \$2.95. How much did she pay for 40 packets?

Ans: \$_____

17. Study the diagram below carefully.



Dorothy is facing the fire station. Which building will she face when she turns 135° in the clockwise direction?

Ans: _____

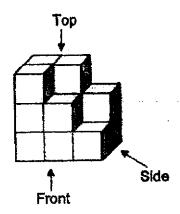
18.	Find the value of $2\frac{3}{4} - 1\frac{2}{5}$. Give your answer as a mixed number simplest form.	in the	Do not write in this space
	Ans:		
19.	There were 160 pupils in a drama club last year. This year, there pupils in the same club. What is the percentage decrease in the nu pupils who join the drama club this year?		
			Washington to a Control of the Contr
			kom a primarapampanya kata kaj
	Ans:	%	
20.	When Sunny reached a cinema at 6.50 p.m., he was already 10 minifor the movie. The movie ended at 9.00 p.m How long was the duthe movie?	ites late ration of	or you do the factor of the fa
			Andreas de la Companya de la Company
			and distribution of the control of t
	.		
	Ans:	<u> </u>	

Questions 21 to 30 carry 2 marks each. Show your workings 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.

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All diagrams in this paper are not drawn to scale unless stated otherwise. (20 marks)

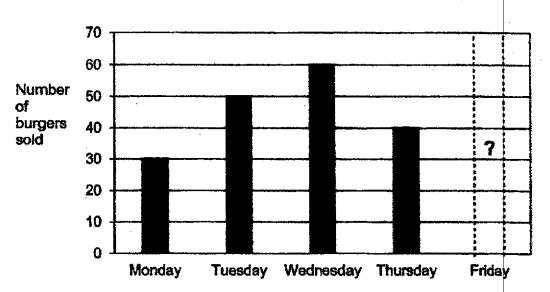
21. The solid below is made up of 14 cubes. In the grid below, draw the side view of the solid.



Side View

22. The graph below shows the number of burgers sold from Monday to Thursday. The number of burgers sold on Friday is equal to the average number of burgers sold from Monday to Thursday. What is the number of burgers sold on Friday?

Do not write in this space



Ans:_____

23. Kelly bought a dress for \$50 and 3 blouses at \$w each. If the total cost of the dress and 3 blouses was \$110, find the value of w.

Ans:____

In the diagram below, STVW is a trapezium and SU is parallel to WV. 24. Do not write TU = UV. Find \angle TUV. in this space W Ans: Mrs Koh bought 90 tarts and repacked them into boxes of 8. How many more 25. tarts would she need to buy to fill up the last box of 8 tarts?

Ans.

26.	Jack poure tank as sh after he ha	empty he tank	Do not write in this space		
,			10 cm		
_			//		
			50 cm		
		80 cm			Ì
				·	
			4		
	: 	•	Ans:	cm	
er er	c aew den	: 4. After Carol's brothe kers. How many sticker	Carol had to the number of stickers had given her 20 more stickers add Siti have?	, Carol	We company to the com
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			•		
			Ans:		
· · · · · · · · · · · · · · · · · · ·					

28.	Starting on a Monday, Ken saved some money every day. He increased his savings by 20 cents each day until Thursday. He saved a total of \$6 by the end of the four days. How much did he save on Monday?	Do not write in this space
		The second secon
		Andrews of the state of the sta
	Ans: \$	
29.	There were 5 bowls containing the same number of grapes each at first. Then, 4 grapes were eaten from each bowl. In the end, the total number of grapes left in the 5 bowls was the same as the total number of grapes in the 3 bowls at first. What was the number of grapes in each bowl at first?	And the control of th
	Ans:	

In the square grid below, AB and BC are straight lines. 30. Do not write (a) Measure and write down the size ABC. in this space (b) AB and BC form two sides of a trapezium ABCD. AD is parallel to BC and is twice the length of BC. Complete the drawing of trapezium ABCD. [1] A В C Ans: (a) ____ ° [1] **End of Paper**



Rosyth School Mid-Year Examination 2021 Mathematics Primary 6

Name:		Re	gister No.
Class: Pr 6	Group:		
Date: 10 May 2021		Parent's Signature:	
Time: 1 h 30 min			

PAPER 2

instructions to Pupils:

- 1. Do not open this booklet until you are told to do so.
- 2. Follow all instructions carefully.
- 3. Show your workings clearly as marks are awarded for correct working.
- 4. Write your answers in this booklet.
- 5. You are allowed to use a calculator.
- Answer all questions.

Questions	Maximum Mark	Marks Obtained	
Q 1 to 5	10		
Q 6 to 17	45		

Section	Maximum Mark	Marks Obtained
Paper 1	45	
Paper 2	55	
Total	100	

^{*} This booklet consists of 18 pages (including this cover page)

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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.		
Ali d	liagrams in this paper are not drawn to scale unless stated otherwise. (10 marks)	
1.	John bought 15 identical plates. Siti bought 11 such plates. She also bought 5 cups for \$40. Both John and Siti spent the same amount of money. What was the cost of 1 plate?	
		:
	en e	
	Ans: \$	
2.	Every 6 cupcakes for \$3p Mrs Devi bought 24 cupcakes. She gave the cashier \$50. How much chang would she receive? Give your answer in terms of p.	je.
	Ans: \$	

3.	In the figure below, the rectangle ABCD is made up of two parts Y at The length of AB is twice of the length of BC. Part Y is formed semicircle and the line AD. The perimeter of Y is 90 cm. The perimeter shaded part, W, is 230 cm. Find the perimeter of the rectangle ABCD.	by a	Do not write in this space
-	A P S S S S S S S S S S S S S S S S S S	·	
	Ans:	cm	
4.	Mark and Ali collected some newspapers for recycling. The ratio of the of the newspapers Mark collected to the mass of the newspaper collected was 1:3. After their neighbours gave them 42 kg of newspapers, their ratio became 2:3. How many kilograms of newspapers did of them collect altogether in the end?	ers Ali	
٠			

5. Ken can paint a room in 8 hours. Raja can paint the same room in 10 hours.

Do not write in this space

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

Statement	True	False	Not Possible To Tell
Both of them will take less than 4 hours to finish painting the room together.			
With a third person to paint the same room together, the 3 of them could finish painting the room in less than 4 hours.			

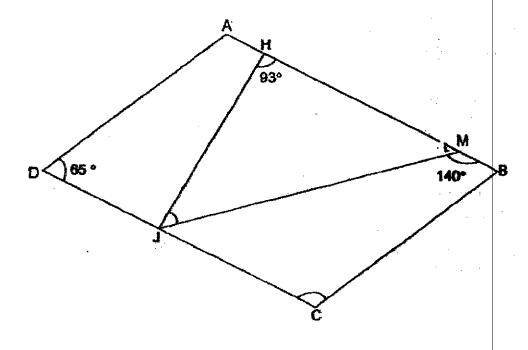
For Questions 6 to 17, show your working clearly in the space provided for each question and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. For questions which require units, give your answers in the units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

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All diagrams in this paper are not drawn to scale unless stated otherwise.

(45 marks)

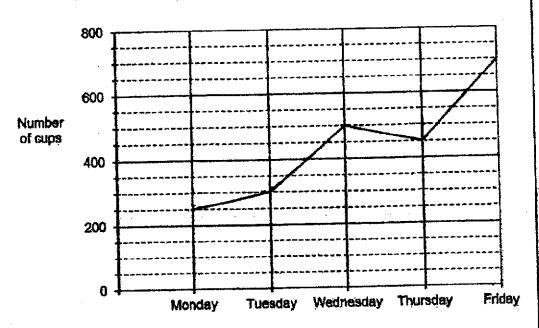
- The figure below is not drawn to scale. ABCD is a parallelogram. HMJ is a triangle. ∠ADJ = 65°, ∠MHJ = 93° and ∠BMJ = 140°.
 - (a) Find ∠BCD.
 - (b) Find ZHJM.



Ans: (a) _____[1] [2]

7. The graph below shows the number of cups of bubble tea sold in a shop from Monday to Friday.

Do not write in this space



- (a) How many more cups of bubble tea were sold on Wednesday than on Tuesday?
- (b) What is the percentage increase in the number of cups of bubble tea sold on Friday compared to Monday?

Ans: (a) _____[1]

(b) _____[2]

8.	The table below shows the cost of	of each can of paint.
----	-----------------------------------	-----------------------

Paint	Red	Blue	Yellow
Cost	\$9	\$35	\$32

Mr Tan bought some cans of red, blue and yellow paint. The ratio of the number of cans of red paint to the number of cans of blue paint to the number of cans of yellow paint was 7:5:6. He paid \$2580 for all the cans of paint. How many cans of red paint did he buy?

this space

Do not write in

Ans: _____[3]

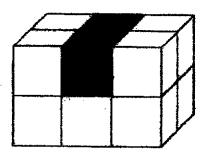
9. Minah had a collection of toys. $\frac{3}{5}$ of them were marbles and the rest were dolls and car models. The number of dolls was $\frac{1}{4}$ of the number of car models. There were 156 more marbles than the dolls. How many toys did she have in her collection?

Do not write in this space

Ans: _____[3]

10. The figure shows a cuboid made up of some identical unit cubes. 2 shaded cubes are removed and the remaining solid is painted red. What is the total number of painted faces?

Do not write in this space



Ans:________[3]

Maiar had a rectangular piece of paper. She folded it along the dotted line as shown in Figure 1. Then, she folded the paper again along the dotted line as shown in Figure 2. Finally, the folded paper is as shown in Figure 3. Given that ∠ EFG = 72° and ∠ JEH = 43°, find

Do not write in this space

- (a) ∠ FEH
- (b)∠EJH

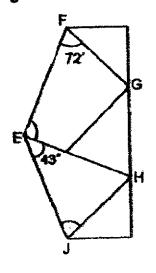
Figure 2

Figure 3

Figure 4

Figure

Figure 3



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				Ans: (a) _		5-2-1	
						[2]	
				(b) _		[2]	12.

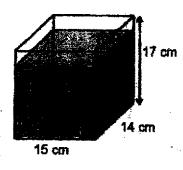
12.	At first, Mr Menon had 380 more books than magazines in his bookshop. He then sold $\frac{1}{4}$ of the books and $\frac{3}{5}$ of the magazines. The number of books	Do not write in this space
	left was 600 more than the number of magazines left. What was the total number of books and magazines Mr Menon had at first?	an rapid to the state of the st
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		телен - 1-62 чет баймин 2 :
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Ans: _

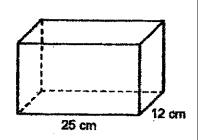
13. Tank X was ⁴/₅ filled with water. Tank Y was empty. All the water from Tank X was poured into Tank Y. After that, Tank Y needed another 1944 cm³ of water to fill to its brim.

Do not write in this space

- (a) What was the volume of water in Tank X at first?
- (b) What was the height of Tank Y?



Tank X



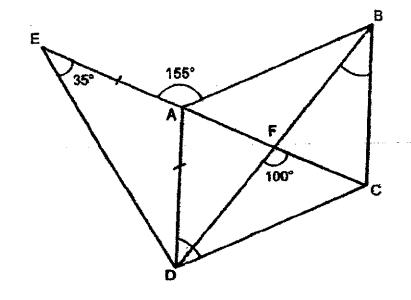
Tank Y

Ans: (a) _____[2] (b) ____[2]

14. In the figure, ABCD is a parallelogram. AD = AE. BD and EAC are straight lines. ∠DFC = 100°, ∠EAB = 155° and ∠ AED = 35°.

Do not write in this space

- (a) Find ∠ADC
- (b) Find ∠CBF



Ans:	(a)		2	
------	-----	--	---	--

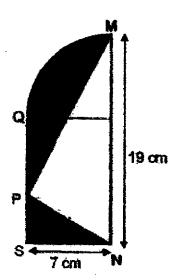
(p)_	 2	,
(a) _	 [4	

15. In the figure, QM is the arc of a quarter circle. MNP is a triangle and MN is perpendicular to SN. SN = 7 cm and MN = 19 cm.

Do not write in this space

- (a) Find the total area of the shaded parts.
- (b) The perimeter of the unshaded triangle is 43.5 cm. Find the perimeter of the shaded parts.

$$(\mathsf{Take}\ \pi = \frac{22}{7})$$



Ans: (a) _____[3]

(p) ______[5]

16. A test pattern for TV screens made up of black and white dots is shown below. The dots will appear at intervals of 1 second.

Do not write in this space

Time	Dots on TV screen	Number of black dots	Number of white dots	Total number of dots
1st sec	4	• 3 0		3
2nd sec		3 4		7
3rd sec	00000	7	5	12
4th sec	••••	12	4	16
5th sec	• • • • • • • • • • • • • • • • • • • •	16	5	21
6th sec		21	4	25

- (a) How many black dots are there at the 8th second mark?
- (b) What is the total number of black and white dots at the 30th second mark?
- (c) At which second mark will the total number of the black and white dots be 188?

 difference between

16.	(to be continued here)		Do not write in this space
			·
	Ans: (a)	[1]	·
	(b)		
·	(c)		1
	17	(Go on to the next p	age)

17.	Mrs Park had 420 more pens than notebooks at her shop. After selling 75% of the pens and some notebooks, she had 20% of the total number of pens and notebooks left. There were 21 notebooks left. What was the total number of pens and notebooks she had at first?	Do not write in this space
		1 .
		} }
		t.
		N CAT LOAD TO PRO-
	Ans:[4]	
	/VIII	
	End of paper Have you checked your work?	Andreas -

ANSWER KEY

YEAR

: 2021

LEVEL

: PRIMARY 6

SCHOOL: ROSYTH

SUBJECT

: MATHEMATICS

TERM

: MID-YEAR EXAM

BOOKLET A (PAPER 1)

Q1	4	Q2	3	Q3	2	Q4	2	Q5	4
Q6	1	Q7	4	Q8	2	Q9	1	Q10	2
Q11	2	Q12	4	Q13	3	Q14	1	Q15	2

BOOKLET B (PAPER 1)

046		r	
Q16	40 x \$2.95 = 4 x 10 x \$2.95	Q17	Supermarket
	=\$11.80 x 10 = \$118		
Q18	$2\frac{3}{1} - 1\frac{2}{1} = 2\frac{15}{10} - 1\frac{8}{10} = 1\frac{7}{10}$	Q19	$\% \downarrow \rightarrow \frac{160-120}{100} \times 100\% = 25\%$
020	4 5 Z0 Z0 Z0 Z0		100 X 100% - 25%
Q20	2h10min + 10min = 2h20min	Q21	
	$=2\frac{1}{2}h$		
	3		
Q22	Average $\rightarrow \frac{30+50+60+40}{4} = 45$	Q23	Total cost → \$(50+3w)=\$110
	4		3w → 110 - 50 = 60
	·		$W \rightarrow 60 \div 3 = 20$
Q24	<tuv -="" 180°="" 36°="108°</td" →=""><td>Q25</td><td>Extra → 96 – 90 = 6</td></tuv>	Q25	Extra → 96 – 90 = 6
Q26	Poured out → 16L x 2 = 32L	Q27	Carol (at first) → 62 - 20 = 42
	=32000cm3		3u → 42
	Height → 32000÷80 ÷ 50 = 8cm	1	$4u \to 42 \div 3 \times 4 = 56$
Q28	4u → \$6 - \$0.20 x 6 = \$4.80	Q29	2 bowls → 4 x 5 = 20
	1u → \$4.80 ÷ 4 = \$1.20		1 bowl \rightarrow 20 \div 2 = 10
Q30	a) 122°		
	b)	1	·
		1	

BOOKLET B (PAPER 2)

Q1	15plates = 11 plates + 5cups	Q2	6cupcakes → \$(3p)
	4plates = 5cups		24 cupcakes → \$(12p)

	4plates → \$40 1plates → \$10		Change → \$(50 – 12p)
Q3	Perimeter → 70 + 70 + 70 =210cm	Q4	Total \rightarrow 4u + 6u = 10u 10u $\rightarrow \frac{10}{3}$ x 42 = 140kg
Q5	False Not Possible To Tell	Q6	a) <bcd -="" 180°="" 65°="115°<br" →="">b) <mjc -="" 180°="" 40°<br="" 93°="" →="">=47°</mjc></bcd>
Q7	a) Wed – Tuesday \rightarrow 500 – 300 = 200 b) Diff \rightarrow 700 – 250 = 450 % $\uparrow \rightarrow \frac{450}{250}$ x 100% = 180%	Q8	Total cost of 1 set→ \$63+\$175+\$192 = \$430 No of set C → \$2580 ÷ \$430 =6 sets Red paint → 6 x 7 = 42
Q9	$\frac{dolls}{total} \rightarrow \frac{2}{5} \times \frac{1}{5} = \frac{2}{25}$ $\frac{marble-dolls}{total} \rightarrow \frac{3}{5} - \frac{2}{25} = \frac{15}{25}$ $\frac{13}{25} \rightarrow 156$ $\frac{25}{25} \rightarrow \frac{156}{13} \times 25 = 300$	Q10	Total no of faces → 6 x 4 + 4 x 2 =32 Painted → 32 - 4 + 6 = 34
Q11	a) $\langle \text{FEH} \rightarrow 180^{\circ} - 43^{\circ} - 43^{\circ}$ = 94° b) $\langle \text{EAG} \rightarrow 180^{\circ} - 90^{\circ} - 72^{\circ}$ = 18° $\langle \text{AAJ} \rightarrow 90^{\circ} - 18^{\circ} - 18^{\circ}$ = 54° $\langle \text{ABJ} \rightarrow 18^{\circ} + 43^{\circ} = 61^{\circ}$ $\langle \text{EJH} \rightarrow 180^{\circ} - 54^{\circ} - 61^{\circ}$ = 65°	Q12	15u + 285 - 8u = 600 7u = 600 - 285 = 315 1u = 315 ÷ 7 = 45 40u + 380 = 40 x 45 + 380 = 2180
Q13	 a) Tank X → 15 x 14 x 17 x ⁴/₅ =2856cm3 b) Tank Y (capacity) → 4800 ÷ 25 ÷ 12 = 16cm 	Q14	a) <adc +="" 30°="" 55°="85°<br" →="">b) <dbc 30°<="" td="" →=""></dbc></adc>
Q15	a) $(\frac{1}{4} \times \frac{22}{7} \times 7 \times 7 + 84) - 66.5$ 38.5 + 84 - 66.5 = 56 cm 2 b) $\frac{1}{4} \times \frac{22}{7} \times \frac{14}{1} = 11$ 24.5 + 11 + 12 + 7 = 54.5 cm	Q16	a) $8^{th} \sec(B) \rightarrow 21 + 4 + 5 = 30$ b) $30 - 6 = 24$ $24 \div 2 = 12$ $12 \times 9 = 108$ 25 108 = 133 c) 22^{nd} even no $\rightarrow 22 \times 2 = 44$
Q17	$X \rightarrow 1u + 189$ $3u \rightarrow 21 + 189 = 210$ At First $\rightarrow 8u + 420$ $=(210 \times \frac{8}{3}) + 420 = 980$		