

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887



END-OF-YEAR EXAMINATION 2019 PRIMARY 5 MATHEMATICS

PAPER 1 BOOKLET A

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

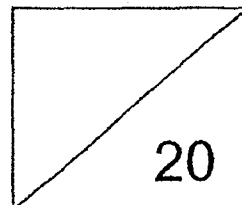
Shade your answers in the Optical Answer Sheet (OAS) provided.

The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5. _____

Date: 24 October 2019



This booklet consists of 7 printed pages including this 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). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

1 Find the value of $36 - 3 \times 9 + 12 \div 3$.

- (1) 7
- (2) 13
- (3) 103
- (4) 231

2 What is the missing number in the box?

$$5\,714\,302 = 5\,000\,000 + \boxed{} + 10\,000 + 4000 + 300 + 2$$

- (1) 700
- (2) 7000
- (3) 70 000
- (4) 700 000

3 Find the value of $1\frac{2}{3} - \frac{3}{4}$.

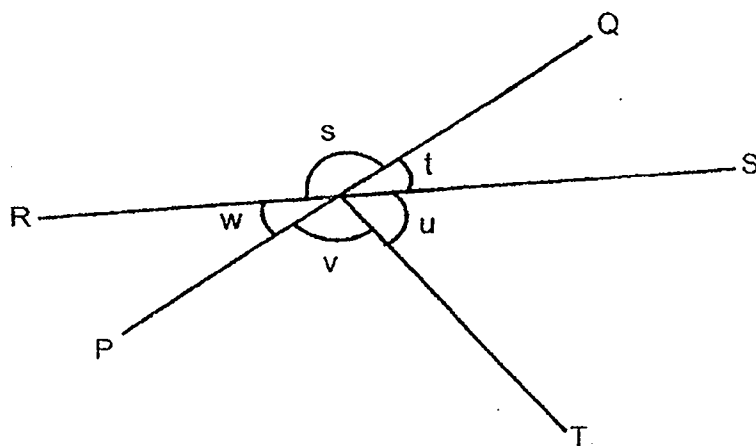
- (1) $\frac{2}{7}$
- (2) $\frac{11}{12}$
- (3) $1\frac{1}{12}$
- (4) $2\frac{5}{12}$

- 4 Express $\frac{5}{8}$ as a decimal. Round your answer to 2 decimal places.
- (1) 0.60
 - (2) 0.62
 - (3) 0.63
 - (4) 1.60
- 5 Express 3 km 50 m in kilometres.
- (1) 0.35 km
 - (2) 3.05 km
 - (3) 3.50 km
 - (4) 3.005 km
- 6 Express 0.64 as a percentage.
- (1) 0.64%
 - (2) 6.4%
 - (3) 64%
 - (4) 640%
- 7 Peter bought a printer which cost \$500 before GST. He had to pay an additional 7% GST. How much was the GST?
- (1) \$7
 - (2) \$35
 - (3) \$350
 - (4) \$535

8. There are 42 beads. 24 of the beads are red and the rest are blue. What is the ratio of the number of red beads to the number of blue beads?

- (1) 3 : 4
- (2) 3 : 7
- (3) 4 : 3
- (4) 4 : 7

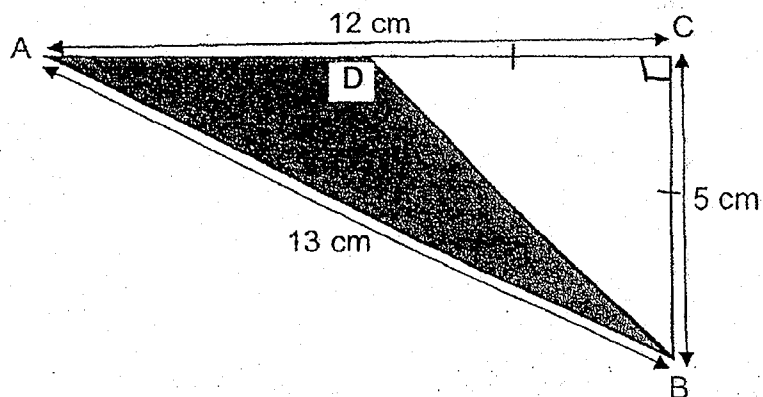
9. In the figure below, PQ and RS are straight lines. Which of the following about the figure is **false**?



- (1) $\angle w = \angle t$
- (2) $\angle s = \angle v$
- (3) $\angle v + \angle u = \angle s$
- (4) $\angle s + \angle t = 180^\circ$

- 10 The number of muffins sold in Starlight Cafe last year, when rounded to the nearest ten thousand, is 320 000. Which of the following is most likely to be the number of muffins sold?
- (1) 310 964
 - (2) 314 798
 - (3) 323 564
 - (4) 326 789
- 11 A rectangular tank measures 20 cm by 15 cm by 5 cm. It is $\frac{3}{5}$ -filled with water. What is the volume of the water in the tank?
- (1) 300 cm³
 - (2) 600 cm³
 - (3) 900 cm³
 - (4) 1500 cm³

- 12 In the figure below, $BC = CD$ and ADC is a straight line. Find the area of triangle ABD .



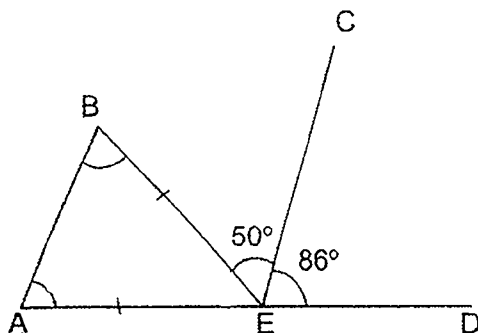
- (1) 12.5 cm^2
- (2) 17.5 cm^2
- (3) 30.0 cm^2
- (4) 32.5 cm^2
- 13 Mary received \$200. She spent $\frac{4}{5}$ of it over 5 days. She spent the same amount of money each day. How much did she spend each day?

- (1) \$32
- (2) \$40
- (3) \$80
- (4) \$160

- 14 A shop had 104 mobile phones for sale. It sold 32 of them in the morning and $\frac{5}{8}$ of the remainder in the afternoon. How many mobile phones were not sold?

- (1) 27
- (2) 39
- (3) 45
- (4) 64

- 15 In the figure below, ABE is an isosceles triangle, $\angle BEC = 50^\circ$ and $\angle CED = 86^\circ$. AED is a straight line. Find $\angle ABE$.



- (1) 22°
- (2) 44°
- (3) 50°
- (4) 68°

METHODIST GIRLS' SCHOOL (PRIMARY)

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END-OF-YEAR EXAMINATION 2019 PRIMARY 5 MATHEMATICS

PAPER 1 BOOKLET B

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5. _____

Date: 24 October 2019

Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 25
Paper 2	/ 55
TOTAL	/ 100

Parent's Signature: _____

This booklet consists of **8** printed pages including this page.

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)

Do not write
in this space

16 Round 79 509 to the nearest thousand.

Ans: _____

17 $438 \times 6 = 238 \times 6 + \square \times 6$

Ans: _____

18 What is 60 kg 2 g in grams?

Ans: _____ g

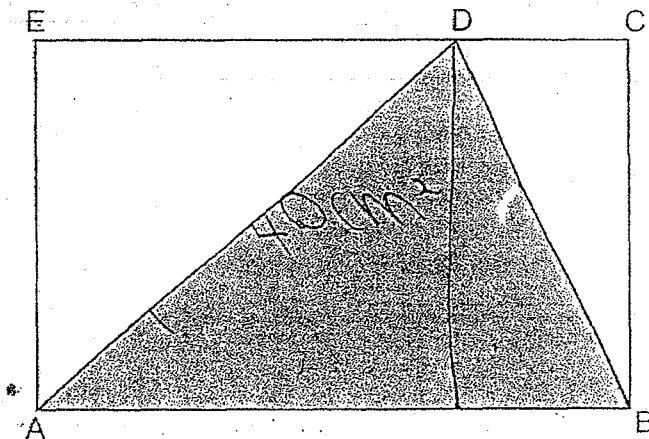
- 19 A baker sold 540 tarts. 35% of them were peach tarts and the rest were strawberry tarts. How many strawberry tarts did the baker sell?

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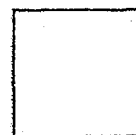
Ans: _____



- 20 ABCE is a rectangle and ABD is a triangle.
The area of rectangle ABCE is 40 cm^2 .
What is the area of triangle ABD?



Ans: _____ cm^2



Questions 21 to 30 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. (20 marks)

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- 21 After spending $\frac{3}{10}$ of his money on a computer game, Dylan had \$84 left. How much did the game cost?

Ans: \$ _____

- 22 Joseph saved \$5000 in a bank. The interest rate is 3% per year. How much interest did he receive at the end of one year?

Ans: \$ _____

- 23 There are 40 pupils in a class. 15 pupils are in the Art Club, 17 pupils are in the Science Club and the remaining pupils are in the Dance Club. What percentage of the pupils are in the Dance Club?

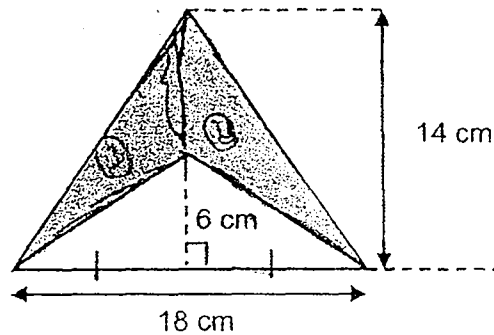
Do not write
in this space

Ans: _____ %

- 24 The ratio of the amount of money that Niki had to the amount of money that Ryan had was 3 : 5. Ryan had \$75. How much did Niki have?

Ans: \$ _____

- 25 Find the area of the shaded part in the figure shown below.



Do not write
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Ans: _____ cm^2

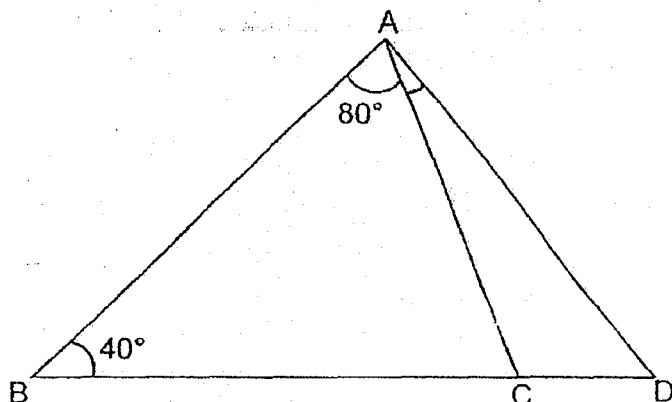


- 26 The average height of 5 boys was 1.42 m. One of the boys, whose height was 1.3 m, left the group.
What was the average height of the remaining boys?

Ans: _____ m



- 27 $\angle ACB$ is three times the size of $\angle CAD$. Find $\angle CAD$.



Ans: _____°

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in this space



- 28 The following table shows the time taken by 4 participants to complete the Math Olympiad test in a competition. Some of the recorded data are covered by an ink patch.

Name	Time taken in minutes (to the nearest whole number)
Anna	6
Beth	8
Carine	9
Lai Quan	86

The average time taken by the 4 participants was 82 minutes.

Carine took 39 min more than Anna. What was the time taken by Beth to complete the test?

Ans: _____



- 29 A baker used 0.12 kg of sugar to bake a butter cake. He used 3 times as much sugar to bake a chocolate cake. How much sugar is needed for 5 chocolate cakes?

Do not write
in this space

Ans: _____ kg

- 30 A rectangular tank measuring 60 cm by 50 cm by 15 cm was empty at first. Water flowed from a tap into the tank at a rate of 5ℓ per min. How long would it take to fill the tank completely?

Ans: _____ min

METHODIST GIRLS' SCHOOL (PRIMARY)

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END-OF-YEAR EXAMINATION 2019 PRIMARY 5 MATHEMATICS

PAPER 2

Duration: 1h 30 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

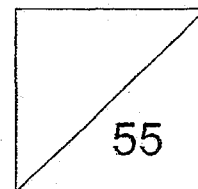
Write your answers in this booklet.

The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 5. _____

Date: 24 October 2019



Parent's Signature: _____

This booklet consists of 15 printed pages including this 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)

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space

1. Norman spent \$6499 on a television and a dining set. The television cost \$199 more than the dining set. How much did the dining set cost?

Ans: \$ _____

2.

First 6 curry puffs	\$1 each
Additional curry puff	80 cents each

Jack has \$50. What is the greatest number of curry puffs that he can buy?

Ans: _____

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space

- 3 A piece of wrapping paper is 50 cm long and 25 cm wide. 200 cm² of the wrapping paper is used to wrap a present. What percentage of the wrapping paper is used to wrap the present?

Ans: _____ %



- 4 Calvin, Victor and Hassan shared a box of stickers in the ratio 5 : 9 : 3. Victor had 24 stickers more than Calvin. How many stickers did the three boys share altogether?

Ans: _____

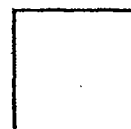


Leo took three mathematics tests. The average score of the three tests was 86. His lowest score was more than 80.

Each statement below is either true, false or not possible to tell from the information given above. For each statement, put a tick (✓) in the correct column.

Do not write
in this
space

Statement	True	False	Not possible to tell
(a) Leo's highest score was 90.			
(b) Leo scored 88 and 91 for two of his tests.			



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

Do not write
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- 6 Alice read 24 pages of a story book every day while Betty read 16 pages of the same story book every day. Betty started reading the book on Monday, 2 days ahead of Alice. On which day would both of them be on the same page?

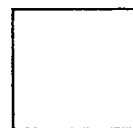
Ans: _____ [3]



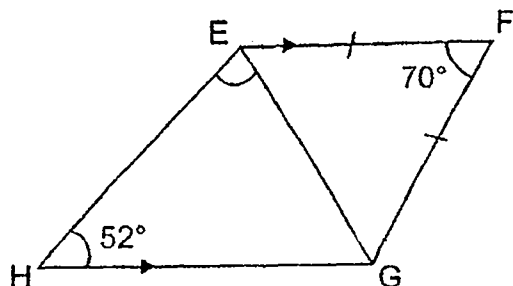
- 7 Mrs Raja had 5 ℓ of paint. She poured $\frac{3}{10}$ of it into a pail. She used the paint in the pail to paint the storeroom. After painting the storeroom, she had $\frac{1}{5}$ ℓ of paint left in the pail. How much paint did she use to paint the storeroom?

Do not write
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space

Ans: _____ [3]



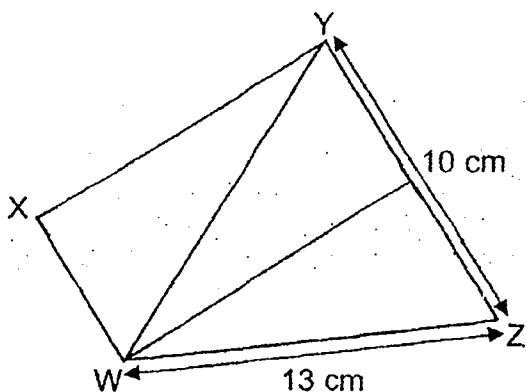
- 8 In the figure below, EFGH is a trapezium with $EF \parallel HG$ and $EF = FG$.
 $\angle EFG = 70^\circ$ and $\angle EHG = 52^\circ$. Find $\angle HEG$.



Ans: _____ [3]

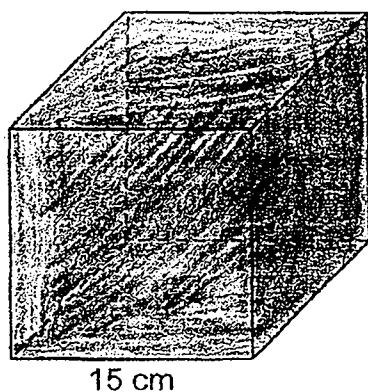
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- 9 Rebecca cut out three identical right-angled triangles. She joined them to form figure WXYZ as shown below. The perimeter of the figure WXYZ is 40 cm, $YZ = 10$ cm and $WZ = 13$ cm. Find the area of figure WXYZ.

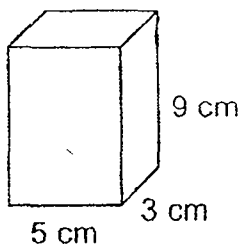


Ans: _____ [3]

- 10 A cubical tank of side 15 cm was completely filled with water. All the water was then poured into some empty rectangular containers to the brim. Each rectangular container measures 5 cm by 3 cm by 9 cm.
- (a) What was the volume of the cubical tank?
- (b) How many rectangular containers were used?



Tank



Rectangular container

Do not write
in this
space

Ans: (a) _____ [1]

(b) _____ [2]



- 11 Siti wanted to buy 30 markers but she was short of \$14. She bought 22 markers instead and had \$18 left. How much money did Siti have?

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space

Ans: _____ [4]



12 Mr Gopal bought a camera for \$1800. He was given a discount of 20%. He had to pay 7% GST on the discounted price.

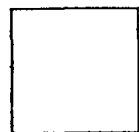
(a) How much was the discount for the camera?

(b) How much did Mr Gopal pay for the camera including GST?

Do not write
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space

Ans: (a) _____ [2]

(b) _____ [2]



- 13 Angela made a total of 55 keychains in 5 days. Each day, she managed to make 3 more keychains than the day before. She sold all the key chains at \$2.30 each.

- (a) How much would Angela collect from the sale of all the key chains?
(b) How many keychains did Angela make on the last day?

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space

Ans: (a) _____ [1]

(b) _____ [3]



- 14 5 notebooks, 2 pencils and 2 markers cost \$10.
1 pencil and 1 marker cost \$2. 1 notebook and 1 pencil cost \$1.75.
(a) How much did 1 notebook cost?
(b) How much did 1 marker cost?

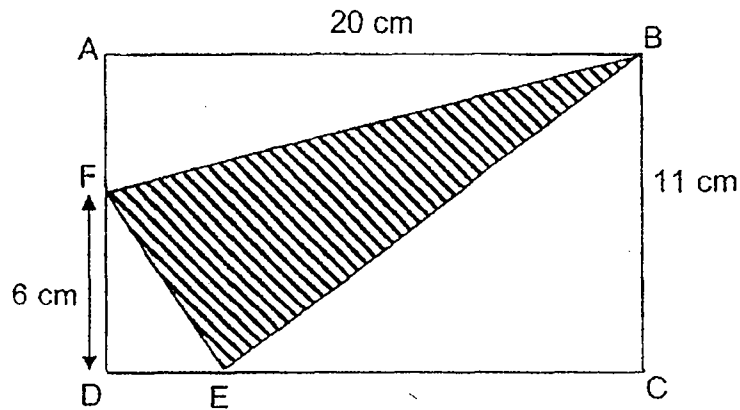
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Ans: (a) _____ [2]

_____ [2]



- 15 ABCD is a rectangle. The length of EC is 4 times the length of DE. Find the area of triangle BEF.



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space

Ans: _____ [5]

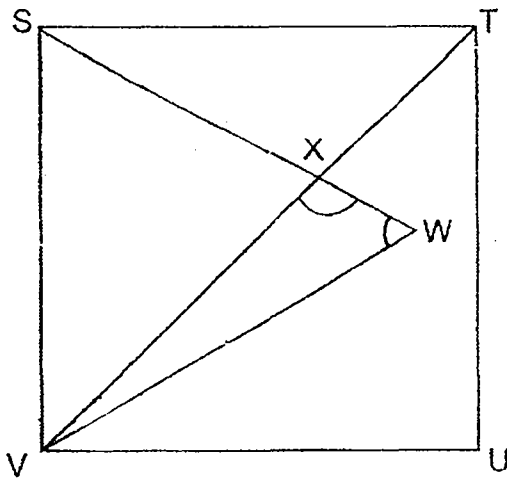


- 16 In the figure below, STUV is a square. SWV is an equilateral triangle and TXV is a straight line.

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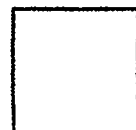
(a) Find $\angle WST$.

(b) Find $\angle VXW$.



Ans: (a) _____ [2]

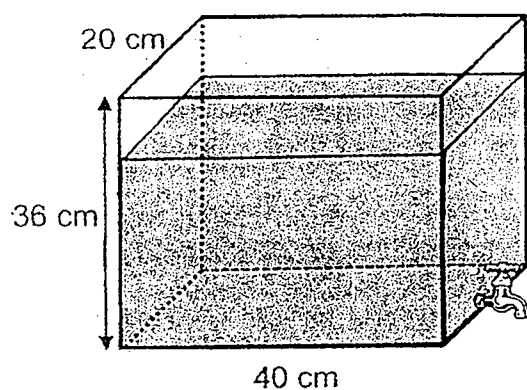
(b) _____ [2]



Do not write
in this
space

- 17 A rectangular tank 40 cm long, 20 cm wide and 36 cm high was $\frac{5}{6}$ -filled with water.

- (a) What was the volume of the water in the tank in litres?
(b) A tap was used to drain the water from the tank at a rate of 4 l per minute. The tap was turned off when the tank was $\frac{1}{3}$ -filled with water. How long did it take to drain the water?



Ans: (a) _____ [2]

(b) _____ [3]



End of Paper

SCHOOL : MGS PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATH
TERM : 2019 SA2

PAPER ONE : BOOKLET A

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

PAPER ONE : BOOKLET B

Q16	80 000
Q17	200
Q18	60 002g
Q19	$540 \times \frac{35}{100} = 189$ $540 - 189 = 351$
Q20	20cm ²
Q21	$\$84 \div 7 = \12 $12 \times 3 = \$36$
Q22	$\$5000 \times \frac{3}{100} = \150
Q23	$40 - 15 - 17 = 8$ $\frac{8}{40} \times 100\% = 20\%$
Q24	$5u \rightarrow \$75$ $3u \rightarrow \$75 \div 5 \times 3 = \45
Q25	$14 - 6 = 8$ $\frac{1}{2} \times 8 \times 18 = 72\text{cm}^2$
Q26	$1.42 \times 5 = 7.1$ $7.10 - 1.30 = 5.80$ $5.80 \div 4 = 1.45$
Q27	$\angle ACB = 180^\circ - 40^\circ - 80^\circ = 60^\circ$ $\angle CAD = 60^\circ \div 3 = 20^\circ$
Q28	Anna $\rightarrow 60$ (99 - 39) Carine $\rightarrow 99$ (60 + 39) Total minutes $\rightarrow 82 \times 4 = 328$ Beth $\rightarrow 328 - 60 - 99 - 86 = 83$

Q29	$0.12 \times 3 = 0.36$ $0.36 \times 5 = 1.8\text{kg}$
Q30	$60 \times 50 \times 15 = 45\,000$ $45\,000\text{ml} = 45\text{L}$ $45 \div 5 = 9\text{min}$

PAPER B:

Q1	$\$6\,499 - \$199 = \$6\,300$ $\$6\,300 \div 2 = \$3\,150$																											
Q2	$6 \times \$1 = \6 $\$50 - \$6 = \$44$ $\$44 \div \$0.80 = 55$ $55 + 6 = 61$																											
Q3	$50 \times 25 = 1250$ $200 \div 1250 = 0.16$ Ans : $0.16 \approx 16\%$																											
Q4	$C : V : H \rightarrow 5 : 9 : 3$ $4u \rightarrow 24$ $1u \rightarrow 24 \div 4 = 6$ Altogether $\rightarrow 17 \times 6 = 102$																											
Q5	(a) Not possible to tell (b) False																											
Q6	<table border="1"><tr><td></td><td>Mon</td><td>Tue</td><td>Wed</td><td>Thu</td><td>Fri</td><td>Sat</td></tr><tr><td>Betty</td><td>16</td><td>32</td><td>48</td><td>64</td><td>80</td><td>96</td></tr><tr><td>Alice</td><td></td><td></td><td>24</td><td>48</td><td>72</td><td>96</td></tr></table>		Mon	Tue	Wed	Thu	Fri	Sat	Betty	16	32	48	64	80	96	Alice			24	48	72	96	Answer : Saturday					
	Mon	Tue	Wed	Thu	Fri	Sat																						
Betty	16	32	48	64	80	96																						
Alice			24	48	72	96																						
Q7	$10u \rightarrow 5L$ $1u \rightarrow 5L \div 10 = 0.5L$ $3u \rightarrow 0.5L \times 3 = 1.5L$																											
Q8	$\angle FEG = (180 - 70) \div 2 = 55$ $\angle HEG = 180 - 52 - 55 = 73$																											
Q9	Length of XY $\rightarrow 40 - 10 - 13 - 5 = 12$ Each Triangle $\rightarrow \frac{1}{2} \times 5 \times 12 = 30\text{cm}^2$ 3 Triangles $\rightarrow 30 \times 3 = 90\text{cm}^2$																											
Q10	(a) $15 \times 15 \times 15 = 3375\text{cm}^3$ (b) $5 \times 3 \times 9 = 135\text{cm}^3$ $3375 \div 135 = 25$																											

Q11	$8 \text{ markers} \rightarrow 14 + 18 = 32$ $1 \text{ marker} \rightarrow 32 \div 8 = \4 $\$4 \times 22 + \$18 = \$106$										
Q12	$(a) \$1\,800 \div 100 \times 20 = \360 $(b) \$1\,800 - \$360 = \$1\,440$ $\$1\,440 \div 100 \times 7 = \100.80 $\$1\,440 + \$100.80 = \$1540.80$										
Q13	$(a) 55 \times \$2.30 = \126.50 (b) <table border="1" data-bbox="327 631 793 855"> <tr> <td>Day 1</td><td>$[]$</td></tr> <tr> <td>Day 2</td><td>$[] + 3$</td></tr> <tr> <td>Day 3</td><td>$[] + 3 + 3$</td></tr> <tr> <td>Day 4</td><td>$[] + 3 + 3 + 3$</td></tr> <tr> <td>Day 5</td><td>$[] + 3 + 3 + 3 + 3$</td></tr> </table> $55 - 30 = 25$ $[] \rightarrow 25 \div 5 = 5$ $5 + 3 + 3 + 3 + 3 = 17 \text{ {ANS}}$	Day 1	$[]$	Day 2	$[] + 3$	Day 3	$[] + 3 + 3$	Day 4	$[] + 3 + 3 + 3$	Day 5	$[] + 3 + 3 + 3 + 3$
Day 1	$[]$										
Day 2	$[] + 3$										
Day 3	$[] + 3 + 3$										
Day 4	$[] + 3 + 3 + 3$										
Day 5	$[] + 3 + 3 + 3 + 3$										
Q14a	$[1p + 1m = \$2] \times 2$ $[2p + 2m = \$4]$ $[5n + 2p + 2m = \$10]$ $5n \rightarrow \$10 - \$4 = \$6$ $1n \rightarrow \$6 \div 5 = \1.20										
Q14b	$1p \rightarrow \$1.75 - \$1.20 = \$0.55$ $1m \rightarrow \$2.00 - \$0.55 = \$1.45$										
Q15	$DE \rightarrow 4\text{cm} ; EC \rightarrow 16\text{cm} ; AF \rightarrow 5\text{cm}$ $DEF \rightarrow \frac{1}{2} \times 4 \times 6 = 12$ $ABF \rightarrow \frac{1}{2} \times 5 \times 20 = 50$ $BCD \rightarrow \frac{1}{2} \times 11 \times 16 = 88$ $\text{Total unshaded} \rightarrow 12 + 50 + 88 = 150$ $\text{Total Area} \rightarrow 20 \times 11 = 220$ $\text{Shaded area} \rightarrow 220 - 150 = 70\text{cm}^2$										
Q16a	$\angle WST = 90 - 60 = 30$										
Q16b	$\angle WVX = 45 - 30 = 15$ $\angle VXW = 180 - 60 - 15 = 105$										

Q17a	$36 \times \frac{5}{6} = 30$ $30 \times 20 \times 40 = 24000\text{cm}^3$ $24000\text{cm}^3 = 24000\text{ml} = 24\text{L}$
Q17b	$36 \times \frac{1}{3} = 12$ $12 \times 20 \times 40 = 9600\text{cm}^3$ $9600\text{cm}^3 = 9600\text{ml} = 9.6\text{L}$ $24\text{L} - 9.6\text{L} = 14.4\text{L}$ $14.4\text{L} \div 4 = 3.6 \text{ minutes}$