

Name : _____ ()

Class : Primary 5 _____

Primary 5 Mathematics

2016 Semestral Assessment Two

Paper 1

Booklet A

25 October 2016

Total Time for Booklets A and B : 50 min

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

The use of calculators is NOT allowed.

This booklet consists of 8 printed pages including the 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). Shade the correct oval (1, 2, 3, or 4) on the Optical Answer Sheet.
(20 marks)

1. Which of the following when rounded to the nearest thousand is 600 000 ?

1) 598 999

2) 590 000

3) 600 499

4) 600 940

2. Express $10\frac{1}{20}$ as a decimal.

1) 10.02

2) 10.05

3) 10.2

4) 10.5

3. In $\frac{2}{3} + \frac{\square}{12} = \frac{5}{6}$, what is the missing number in the box?

1) 9

2) 2

3) 3

4) 18

4. What is the product of 144 and $\frac{8}{9}$?

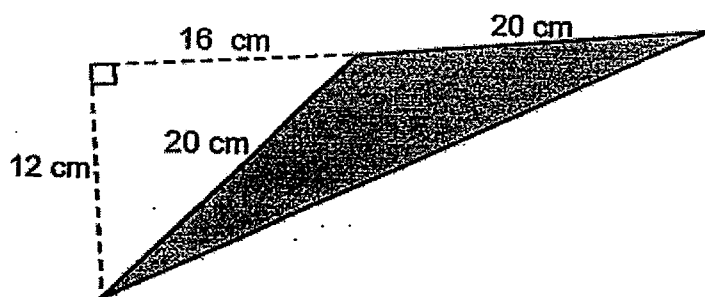
1) 162

2) 128

3) 18

4) 16

5. Find the area of the shaded triangle.



1) 120 cm^2

2) 160 cm^2

3) 200 cm^2

4) 360 cm^2

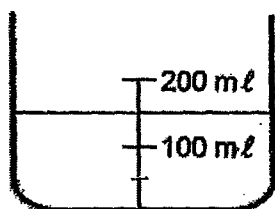
6. The table below shows the beads that 3 girls have.

Name	Number of beads
Myra	32
Tiffany	26
Dionis	40

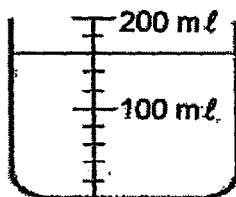
What is the ratio of the number of beads Myra has to the number of beads Tiffany has to the number of beads Dionis has?

- 1) 8 : 7 : 10
 - 2) 10 : 7 : 8
 - 3) 16 : 13 : 20
 - 4) 20 : 13 : 16
7. 330 g of white rice was mixed with some brown rice in the ratio 3 : 5. Find the mass of the brown rice.
- 1) 132 g
 - 2) 198 g
 - 3) 528 g
 - 4) 550 g

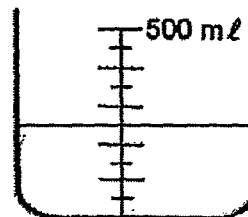
8. Three containers with some water are shown below. Which container has the most water and which container has the least?



A



B



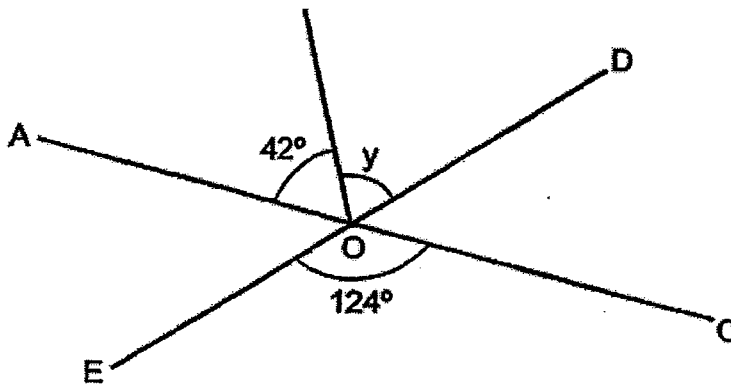
C

- | | <u>Most</u> | <u>Least</u> |
|----|-------------|--------------|
| 1) | A | B |
| 2) | B | C |
| 3) | C | A |
| 4) | C | B |

9. Jerome bought 5 boxes of cream puffs. The total mass of the boxes of cream puffs was 5 kg 50 g. What was the average mass of one box of cream puffs?

- 1) 110 g
- 2) 1100 g
- 3) 1.01 kg
- 4) 10.1 kg

10. The figure is not drawn to scale. AOC and EOD are straight lines. Find $\angle y$.



- 1) 40°
 - 2) 56°
 - 3) 82°
 - 4) 97°
11. Carina and Denzel shared a sum of \$460. Carina received 60% of the money. How much money did Denzel receive?

- 1) \$138
- 2) \$184
- 3) \$276
- 4) \$400

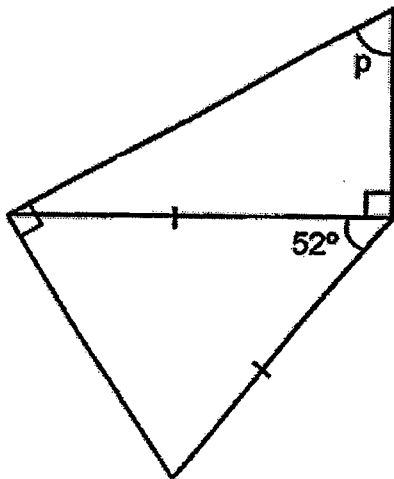
12. The table below shows the marks Richelle scored in her mid-year examination.

Subject	English	Mathematics	Chinese	Science
Marks	84	72	69	72

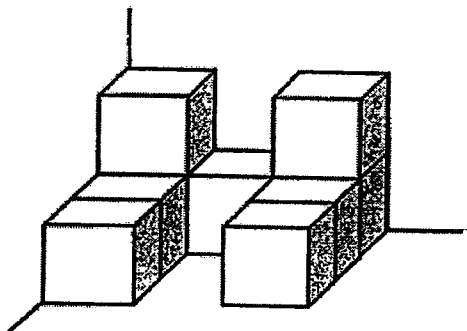
Richelle scored an average of 75 marks for the 4 subjects. What is the greatest possible mark that she could have scored for Science?

- 1) 70
 - 2) 73.5
 - 3) 77
 - 4) 78.5
13. Mrs Wesley bought 60 tarts for a party. 24 were fruit tarts. The rest were durian tarts and egg tarts. There were as many durian tarts as egg tarts. What percentage of the tarts were egg tarts?
- 1) 25%
 - 2) 30%
 - 3) 70%
 - 4) 75%

14. The figure below shows a right-angled triangle and an isosceles triangle. Find $\angle p$.



- 1) 26°
 - 2) 38°
 - 3) 64°
 - 4) 76°
15. Some identical 1-cm cubes are stacked up as shown in the figure. How many more 1-cm cubes are needed to build a 3-cm cube?



- 1) 18
- 2) 20
- 3) 21
- 4) 27

Name : _____ ()

Class : Primary 5 _____

Primary 5 Mathematics

2016 Semestral Assessment Two

Paper 1

Booklet B

25 October 2016

Booklet A	20
Booklet B	20
Total (Paper 1)	40

Total Time for Booklets A and B : 50 min

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

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

This booklet consists of 10 printed pages including the cover page.

Questions 16 to 25 carry 1 mark each. 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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this space.

16. Write seven million and one thousand in numerals.

Ans : _____

17. Find the value of $69 + 9 + 3 - (4 \times 5)$.

Ans : _____

18. In a class, $\frac{1}{8}$ of the children are boys. $\frac{2}{5}$ of the girls play tennis. What fraction of the children in the class are girls who play tennis? Leave your answer in the simplest form.

Ans : _____

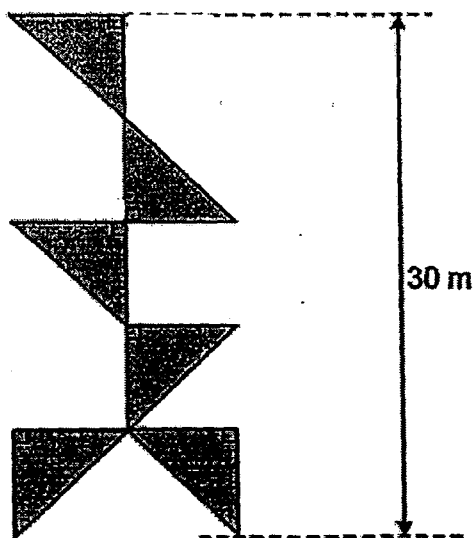


19. 28 similar jugs of water can fill $\frac{4}{7}$ of a pail. How many such jugs are required to fill the whole pail?

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space.

Ans : _____

20. The figure below is made up of 6 identical isosceles triangles. Find the area of the figure.



Ans : _____ m^2

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write in
this
space.

21. A piece of ribbon 9 m was cut into three pieces in the ratio 6 : 3 : 1. What is the difference between the longest piece and the shortest piece? Express your answer as a fraction in the simplest form.

Ans : _____ m

22. What is the value of $3 - \frac{2}{5} - \frac{1}{8}$? Leave your answer as a mixed number.

Ans : _____

23. 704ℓ of orange juice is poured into 400 bottles equally. How much orange juice is in each bottle? Express your answer as a decimal.

Ans : _____ ℓ

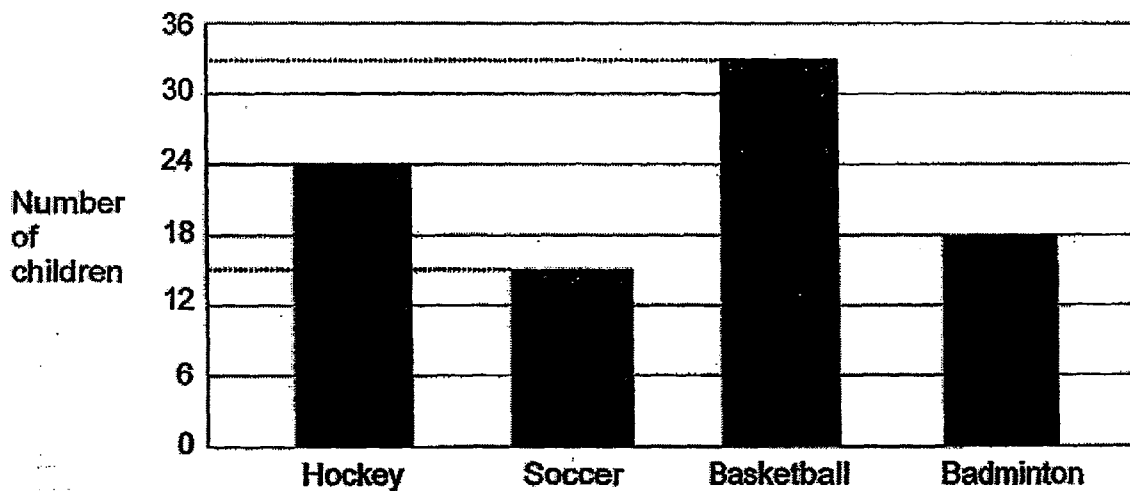


24. In 8 years' time, the average age of Mr Sim and his son will be 27 years. What is their total age now?

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space.

Ans : _____

25. The graph below shows the types of sports that children play in Happykidz Primary School.



What percentage of the children play badminton ?

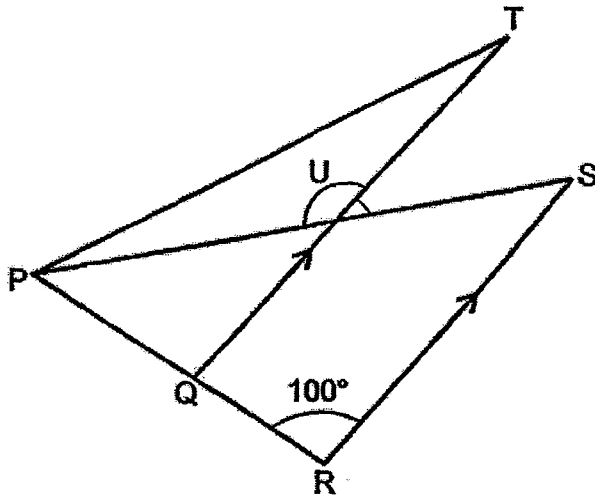
Ans : _____ %



Questions 26 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. (10 marks)

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26. The figure below is not drawn to scale. QUT is a straight line and $QT \parallel RS$. $PR = RS$ and $\angle QRS = 100^\circ$. Find $\angle PUT$.



Ans : _____°



27. The table shows the prices of a similar dress from two different malls.

	Mall A		Mall B	
Item	Original Price	Discount	Original Price	Discount
	\$140	40%	\$150	30%

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this space.

- (a) Which mall sells the dress at a cheaper price?
(b) How much cheaper is the dress?

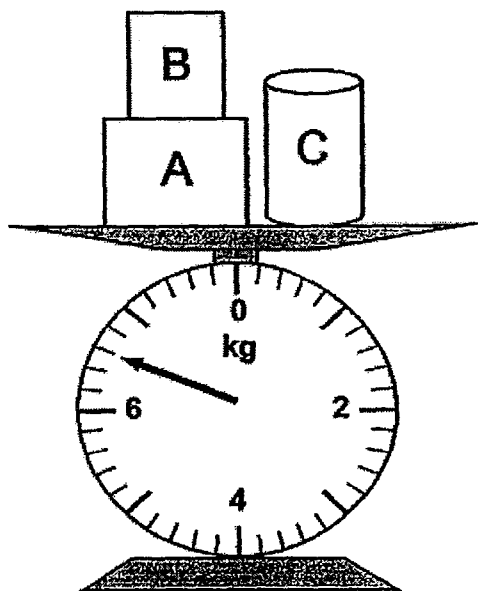
Ans : (a) Mall _____

(b) \$ _____



28. The figure shows the mass of 3 objects, A, B and C.
C has a mass of 2.3 kg. The ratio of the mass of A to the mass of B is 4 : 1.
What is the mass of B?

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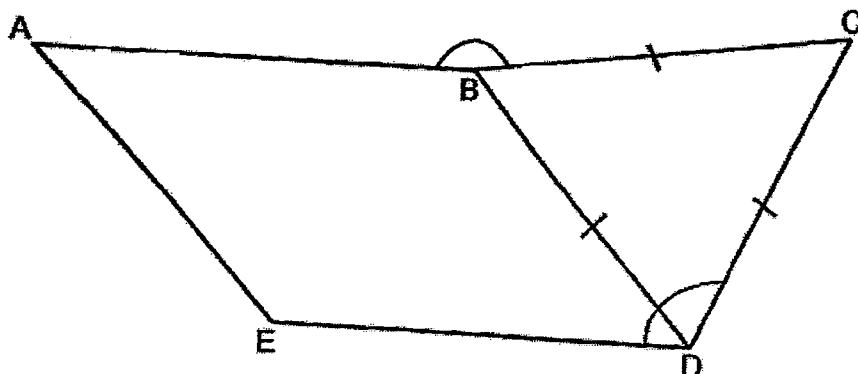


Ans : _____ kg

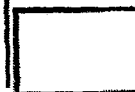


29. In the figure below, ABDE is a parallelogram and $\angle CDE = 106^\circ$. Find $\angle ABC$.

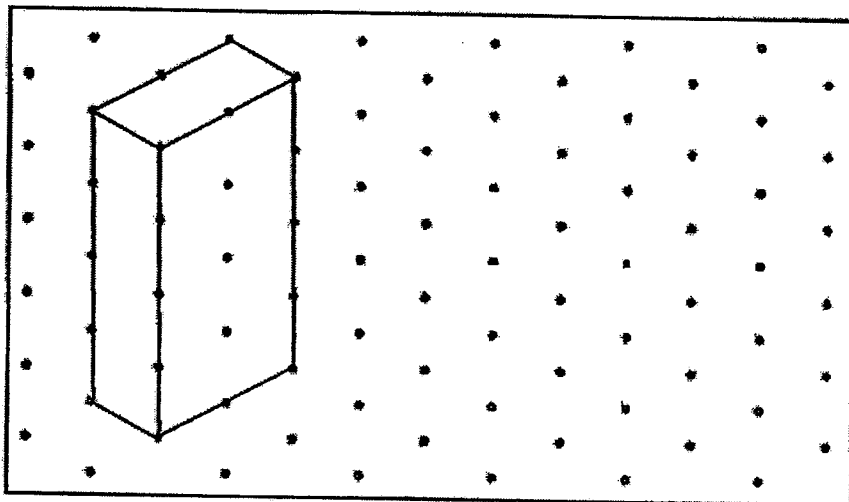
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Ans : _____ °



30. Draw a cube with the same volume as the cuboid given in the grid below.



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****END OF PAPER 1****

Name : _____ ()

Class : Primary 5 _____

Primary 5 Mathematics
2016 Semestral Assessment Two
Paper 2
25 October 2016

Parent's / Guardian's Signature

Time : 1 hour 40 minutes

Paper 1	40
Paper 2	60
Total	100

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

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

This booklet consists of 15 printed pages including the 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.

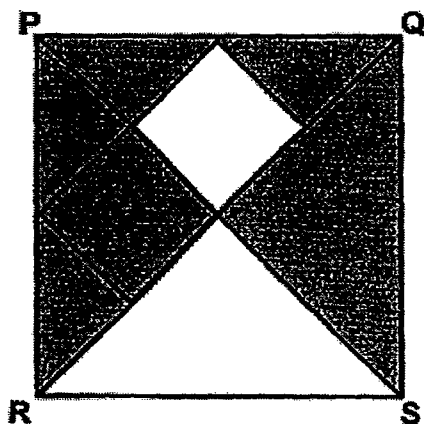
(10 marks)

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1. A tank has a capacity of 6ℓ . It was $\frac{3}{8}$ filled at first. Aiken poured an additional 675 ml of water into the tank. How much more water is needed to fill the tank completely?

Ans : _____ ml

2. A square PQRS is made up of 2 small squares, 4 small triangles and 2 large triangles. PS and QR are straight lines. Find the ratio of the area of the shaded parts to the area of the unshaded parts in PQRS. Express your answer in the simplest form.



Ans : _____



3. Jodina paid \$200 for an equal number of shirts and pairs of shorts. Each shirt cost \$8.50. Each pair of shorts cost \$8 more than each shirt. How many shirts did she buy?


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space.

Ans : _____

4.

**Weekday
Lunch Deal**

Buffet By The Bay
Eat All You Can!
\$20.50 per person
(All prices exclude GST)



Kylie and her 3 friends went to the buffet. How much was their total bill when 7% GST was added?

Ans : \$ _____



5. At a carnival, the ratio of the number of children to the number of adults was 5 : 2. When 133 more children joined in, the number of children was 6 times of the number of adults. How many children were at the carnival at first?

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Ans : _____



For questions 6 to 18, 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.

(50 marks)

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6.

My Little Pony Musical

Tickets at \$18 each

\$3 discount for every 4 tickets



Mrs Milton paid \$363 for tickets to the musical. How many tickets did she pay for?

Ans : _____ [3 m]



7. $\frac{2}{9}$ of the cookies in a box were chocolate chip. There were 46 more hazelnut cookies than chocolate chip cookies in the box. The remaining 94 cookies were mixed nuts cookies. How many hazelnut cookies were in the box?

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Ans : _____ [3 m]

8. Tavia was given \$4 pocket money every day of the week. She spent \$3.40 per day from Monday to Friday and saved the rest. She saved all her pocket money on Saturday and Sunday. Starting on a Monday, how many days did it take her to save \$80?

Ans : _____ [3 m]



9. The average number of pears in 6 boxes is 107. After 3 more boxes of pears are added, the average number of pears in all the boxes becomes 112. What is the average number of the 3 additional boxes of pears?

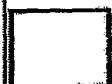
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Ans : _____ [3 m]

10. A rod is 5.25 m long. Equal divisions on the rod are painted white and black alternately. Each painted division is 21 cm long. How many white divisions are there altogether?



Ans : _____ [3 m]



11. The table below shows the charges for water usage.

Volume of water	Charge
First 40 m ³	\$1.27 per m ³
Above 40 m ³	\$1.35 per m ³

- (a) The Lim family used 32 m³ of water in April. How much did the Lim family pay for the water used?
- (b) The Halim family used 63 m³ of water in May. How much did the Halim family pay for the water used?

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Ans : (a) _____ [2 m]

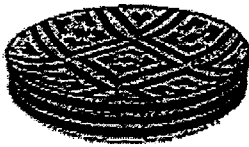
(b) _____ [2 m]



12. The Great Store held a promotion during the Christmas season.

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Special Offer!



Every 3 plates for \$15



Every 8 mugs for \$12

- (a) Lara spent \$180 on each type of item. How many more mugs than plates did she buy?
- (b) Elsie bought an equal number of plates and mugs. She paid \$312 in all. How many mugs and plates did she buy altogether?

Ans : (a) _____ [2 m]

(b) _____ [2 m]



13. Mrs Barker had 3 packs of flour, X, Y and Z. There was 506 g of flour in X. The ratio of the mass of flour in X to the mass of flour in Y to the mass of flour in Z was 2 : 5 : 9. Mrs Barker used $\frac{4}{5}$ of the total amount of flour to make pies. What was the mass of flour left?

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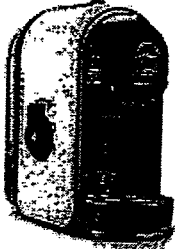
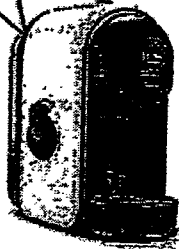
Ans : _____ [4 m]



14.

Mother's Day Promotion!!!

\$108 before discount



Buy the 1st first coffee maker at 10% discount

Buy the 2nd coffee maker at 70% of the discounted price

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- (a) Emma bought two coffee makers. How much did she pay for the 2nd coffee maker?
- (b) How much did Emma pay for the two coffee makers altogether?

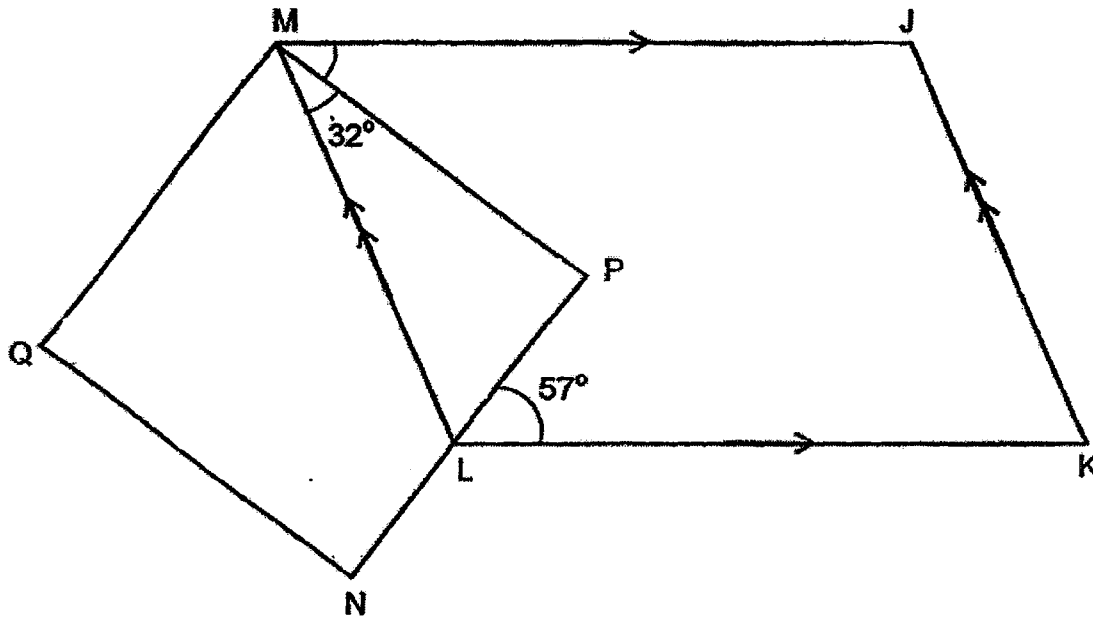
Ans : (a) _____ [3 m]

(b) _____ [1 m]



15. The figure below is not drawn to scale. MPNQ is a square.

- (a) Name the trapezium in the figure.
(b) Find $\angle JMP$



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Ans : (a) _____ [1 m]

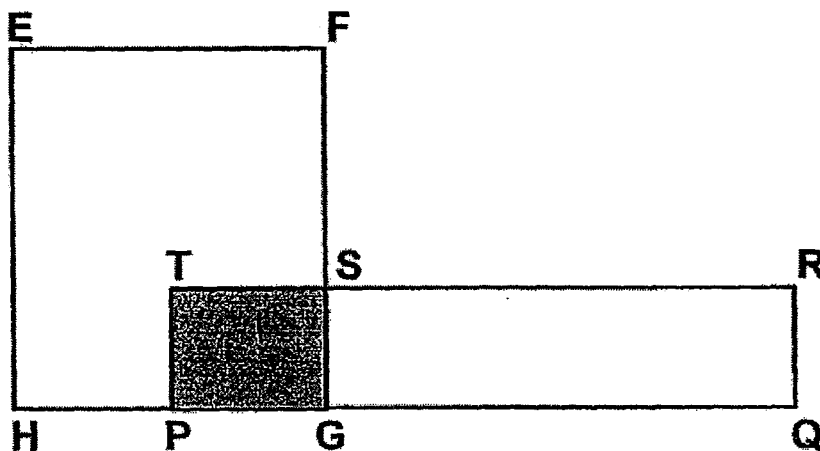
(b) _____ [3 m]



16. The figure below is made up of two rectangles, EFGH and PQRT, overlapping each other.

$\frac{1}{6}$ of EFGH is shaded and $\frac{1}{4}$ of PQRT is shaded.

- (a) What fraction of the figure is not shaded?
(b) The area of the whole figure is 171 cm^2 . Find the difference in the areas of EFGH and PQRT.



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Ans : (a) _____ [2 m]

(b) _____ [3 m]



17. Xavier took part in a 25-km cycling race. There was a water refill station at half the distance of the race.

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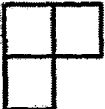
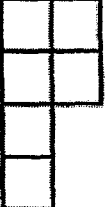
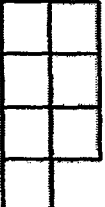

- (a) Xavier stopped at the water refill station to refill his water bottle. How many kilometres was he away from the starting point to the water refill station?
- (b) After passing the water refill station, Xavier cycled $\frac{7}{10}$ of the remaining distance and stopped. How many metres was he away from the finishing point?

Ans : (a) _____ [1 m]

(b) _____ [4 m]



18. The patterns below are made up of squares.

Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6
				?	

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space.

- (a) Draw Pattern 5 on the grid below. [1m]

- (b) How many squares are there in Pattern 10?
(c) Which pattern is made up of 43 squares?

Ans: (b) _____ [1 m]

(c) _____ [3 m]

**** END OF PAPER ****



ANSWER SHEET

EXAM PAPER 2016 (P5)

SCHOOL : CHIJ

SUBJECT : MATHEMATICS

TERM : SA2

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

16) 7001000

17) 52

18) $\frac{2}{5}$

19) 49

20) 108m²

21) $4\frac{1}{2}$ m

22) $2\frac{19}{40}$

23) 1.76L

24) 38

25) 2%

26) $180 - 100 = 80$

27) a) A

28) $6.6 - 2.3 = 4.3$

$80 \div 2 = 40$

b) \$21

$4.3 \text{ kg} = 4300\text{g}$

$40 \times 2 = 80$

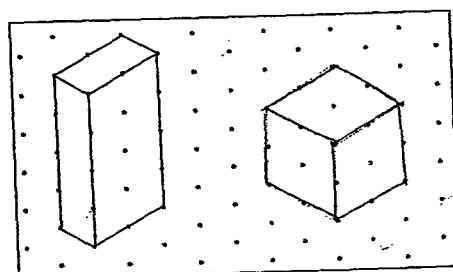
$4300 \div 5 = 860\text{g} = 0.86\text{kg}$

$360 - 80 = 280$

$280 \div 2 = 140^\circ$

29) 166°

30)



Paper 2

1) $6L = 6000ml$

$$6000ml \div 8 = 750ml$$

$$750ml \times 3 = 2250ml$$

$$2250ml + 675ml = 2925ml$$

$$6000ml - 2925ml = 3075ml$$

2) $6 : 10$

$$10 : 6$$

$$5 : 3$$

3) $200 \div 25 = 8$ (no. of groups)

$$8 \times 1 = 8$$

4) $\$20.50 \times 4 = \82 (price excluding GST)

$$82/1 \times 7/100 = \$5.74 \text{ (GST)}$$

$$\$82 + \$5.74 = \$87.74$$

5) $12u - 5u = 7u$

$$7u \rightarrow 133$$

$$1u \rightarrow 133 \div 7 = 19$$

$$19 \times 5 = 95 \text{ children}$$

6) $1 \text{ ticket} \rightarrow \18

$$4 \text{ tickets} \rightarrow \$69 \text{ (1 group)}$$

$$\text{Most number of discounted tickets} \rightarrow 5 \text{ group} \rightarrow \$345$$

$$\$363 - \$345 = \$18 \text{ (1 ticket left)}$$

$$4 \times 5 = 20$$

$$20 + 1 = 21$$

7) 94 → mixed nut cookies

$$46 + 94 = 140 \text{ (5/9)}$$

$$140 \div 5 = 28 \text{ (1/9)}$$

$$28 \times 2 = 56$$

$$56 + 46 = 102$$

8) $4 - 3.40 = 0.60$

$$0.60 \times 5 = 3$$

$$4 \times 2 = 8$$

$$8 + 3 = 11$$

$$80 \div 11 = 7 \text{ r } 3$$

$$7 \times 7 = 49$$

$$3 \div 0.60 = 5$$

$$49 + 5 = 54$$

9) $107 \times 6 = 642$ (total number in 6 boxes)

$$112 \times 9 = 1008 \text{ (total number in 9 boxes)}$$

$$1008 - 642 = 366 \text{ (total number in 3 boxes)}$$

$$366 \div 3 = 122$$

10) $5.46\text{m} \rightarrow 546\text{cm}$

$$21 \times 13 = 273$$

$$273 \times 2 = 546$$

Ans : 13

11)a) $\$1.27 \times 32\text{m}^3 = \40.64

b) $\$1.27 \times 40 = \50.80

$23 \times 11.25 = \$31.05$

$\$50.80 + \$31.05 = \$81.85$

12)a) 3 plates $\rightarrow \$15$

$180 \div 15 = 12$

$12 \times 3 = 36$ (plates)

$180 \div 12 = 15$

$8 \times 15 = 120$ (mugs)

$120 - 36 = 84$

b) $16 \times 15 + 12 \times 6 = 312$

$16 \times 3 = 48$

$12 \times 8 = 96$

13) $506 \div 2 = 253$

$253 \times 16 = 4048$

$4048 \div 5 = 809.6\text{g}$

14)a) $108/1 \times 10/100 = \$10.80$ (dis)

$\$108 - \$10.80 = \$97.20$ (dis price for first cm)

$97.20/1 \times 70/100 = \68.04 (dis)

b) $\$97.20 + \$68.04 = \$165.24$

15)a)MQNL

b) $90 - 32 = 58$

$32 + 90 = 122$

$180 - 122 = 58$

$58 + 57 = 115$

$115 \times 2 = 230$

$230 + 32 + 32 = 294$

$360 - 294 = 66$

$66 \div 2 = 33^\circ$

16)a) $5 + 3 = 8$

$8/9$

b) $171 \div 9 = 19$

$19 \times 6 = 114$

$19 \times 4 = 76$

$114 - 76 = 38 \text{ cm}^2$

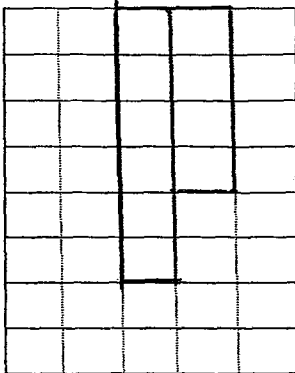
17)a) $25 \text{ km} \rightarrow 25000 \text{ m}$

$25000 \div 2 = 12500 = 12.5 \text{ km}$

b) $12500 \div 10 = 1250$

$1250 \times 3 = 3750 \text{ m}$

18)a)



b) $11 + 3 = 14$ (7)

$14 + 1 = 15$ (8)

$15 + 3 = 18$ (9)

$18 + 1 = 19$ (10)

c) $19 + 3 = 22$ (11)

$22 + 1 = 23$ (12)

$23 + 3 = 26$ (13)

$26 + 1 = 27$ (14)

$27 + 1 = 28$ (15)

$28 + 3 = 31$ (16)

$31 + 1 = 32$ (17)

$32 + 3 = 35$ (18)

$35 + 1 = 36$ (19)

$36 + 3 = 39$ (20)

$39 + 1 = 40$ (21)

$40 + 3 = 43$ (22)