



AI TONG SCHOOL

2019

END-OF-YEAR EXAMINATION

PRIMARY 5

STANDARD MATHEMATICS

PAPER 1

(Booklets A and B)

DURATION : 1 h

DATE : 31 OCTOBER 2019

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

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

You are **not** allowed to use a calculator.

Name: _____ ()

Class: Primary 5 _____

Marks:

Parent's Signature	:	_____
Date	:	_____

Paper 1	45
Paper 2	55
Total	100

Paper 1. Booklet A

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.

For each question, four options are given. One of them is the correct answer.

Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer Sheet.

(20 marks)

1 What is the value of the digit 9 in 890 456?

(1) 900 000

(2) 90 000

(3) 9000

(4) 900

2 Find the value of $108 - 36 \div 3 \times 6$.

(1) 576

(2) 144

(3) 36

(4) 4

3 How many eighths are there in $2\frac{1}{4}$?

(1) 9

(2) 12

(3) 18

(4) 21

4 Which one of the following is closest to 1?

(1) $\frac{2}{3}$

(2) $\frac{3}{4}$

(3) $1\frac{1}{6}$

(4) $1\frac{1}{2}$

5 Express 4 km 10 m in km.

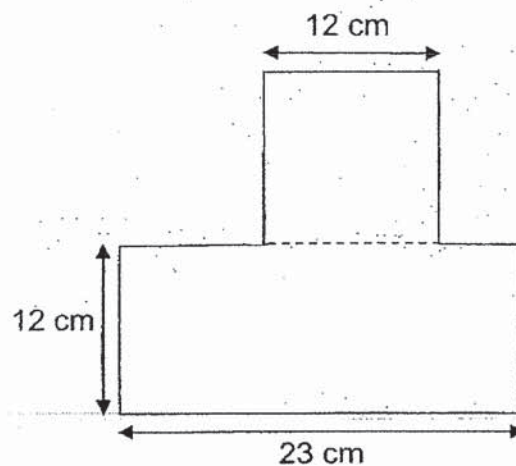
(1) 0.410 km

(2) 4.1 km

(3) 4.01 km

(4) 4.001 km

6 The figure below shows a square and a rectangle. All the lines meet at right angles. Find the perimeter of the figure.



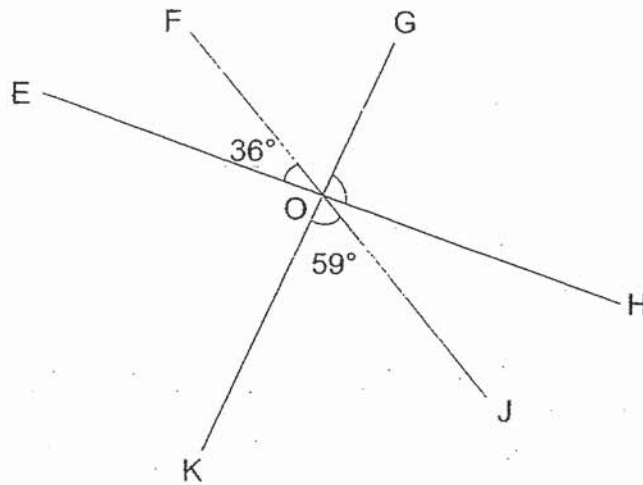
(1) 83 cm

(2) 94 cm

(3) 118 cm

(4) 420 cm

- 7 In the figure, EOH, FOJ and GOK are straight lines. Find $\angle GOH$.



- (1) 85°
(2) 95°
(3) 121°
(4) 144°
- 8 What is the missing number in the \square ?

$$\square : 4 = 15 : 6$$

- (1) 5
(2) 10
(3) 11
(4) 13
- 9 Sam has 36 toys in his toy box. The ratio of the number of toy cars to toy robots to toy planes is 2 : 4 : 3. How many toy cars and planes does Sam have?

- (1) 8
(2) 12
(3) 20
(4) 28

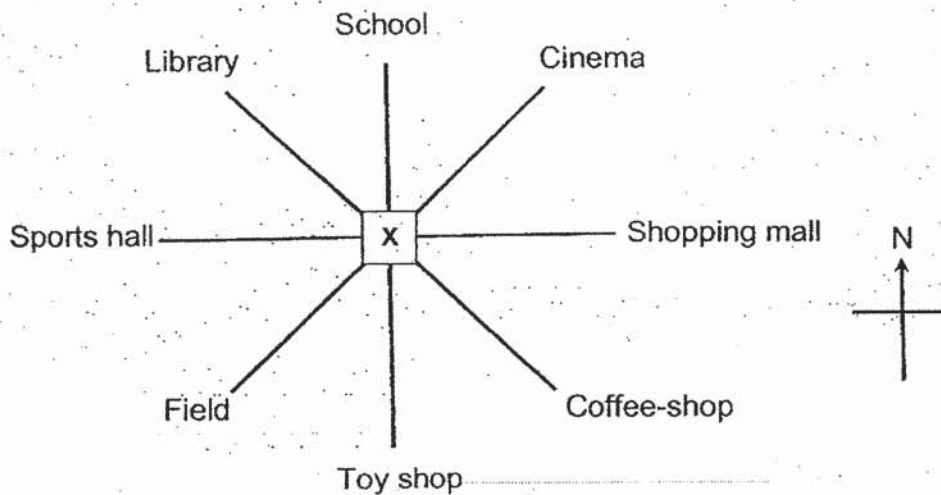
10 A group of 3 girls and 2 boys took a quiz. The average score of the 3 girls was 18. The score of the 2 boys were 6 and 0. Find the average score of the children.

- (1) 60
- (2) 54
- (3) 15
- (4) 12

11 There were 20 pages in a book and Asher read 7 pages. What percentage of the book did he read?

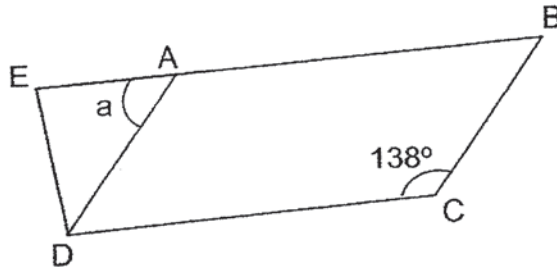
- (1) 7%
- (2) 14%
- (3) 20%
- (4) 35%

12 Xuele stands at Point X and turns 45° anti-clockwise. He faces south-east in the end. Which location was he facing at first?



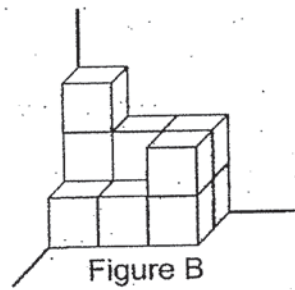
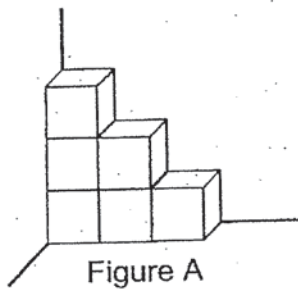
- (1) Field
- (2) Sports hall
- (3) Shopping mall
- (4) Toy shop

- 13 ABCD is a parallelogram and EAD is a triangle. EAB is a straight line. Find $\angle a$.



- (1) 42°
- (2) 45°
- (3) 48°
- (4) 69°

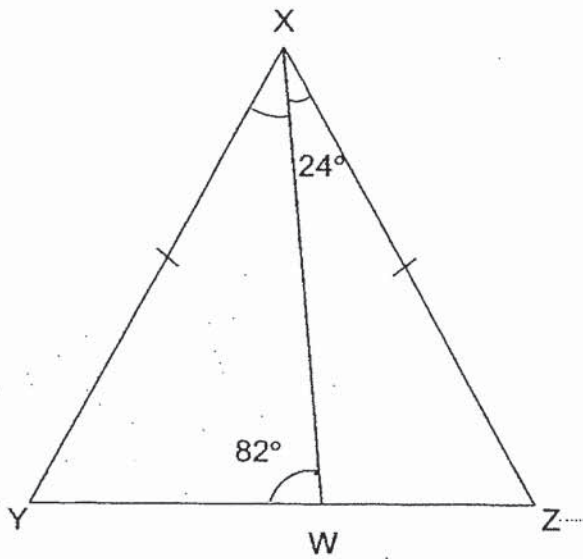
- 14 The 2 solids below are made up of 1-cm cubes.



How many 1-cm cubes must be added to Figure A to form Figure B?

- (1) 5
- (2) 6
- (3) 11
- (4) 17

- 15 In the figure below, XYZ is an isosceles triangle.
 $\angle ZXW = 24^\circ$ and $\angle XWY = 82^\circ$. Find $\angle WXY$.



- (1) 37°
- (2) 40°
- (3) 49°
- (4) 58°

Booklet B

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

16 Write five million, ten thousand and fifteen in figures.

Ans: _____

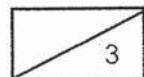
17 A whole number is 900 000 when rounded to the nearest thousand. What is the greatest possible value of this whole number?

Ans: _____

18 What is the missing number in the box?

4205, 14 255, , 34 355, 44 405, 54 455

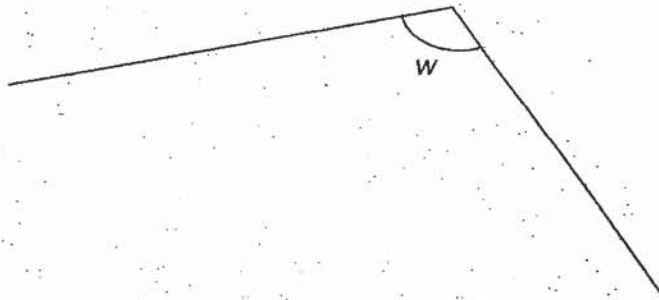
Ans: _____



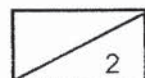
- 19 In a basket, $\frac{5}{6}$ of the fruits are apples. $\frac{4}{5}$ of the apples are red apples. What fraction of the fruits in the basket are red apples? Express the answer in the simplest form.

Ans: _____

- 20 Measure and write down the size of $\angle w$.



Ans: _____°

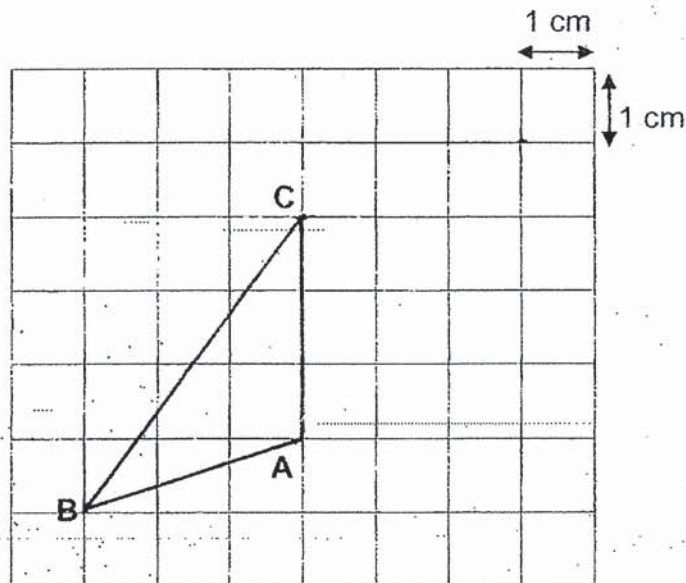


Questions 21 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

21 The square grid is made up of 1-cm squares.

(a) Find the area of triangle ABC.

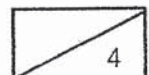
(b) AB and BC form two sides of a parallelogram ABCD. Complete the drawing of parallelogram ABCD. Label Point D.



Ans: (a) _____ cm²

22 When 20 identical books were stacked one on top of the other, the height was 44.8 cm. After 13 books were removed, what was the height of the remaining stack of books?

Ans: _____ cm



23 Express $\frac{5}{9}$ as a decimal correct to 2 decimal places.

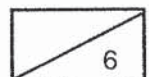
Ans: _____

24 There are 1700 trees in a plantation. 35% of the trees are papaya trees.
How many papaya trees are there?

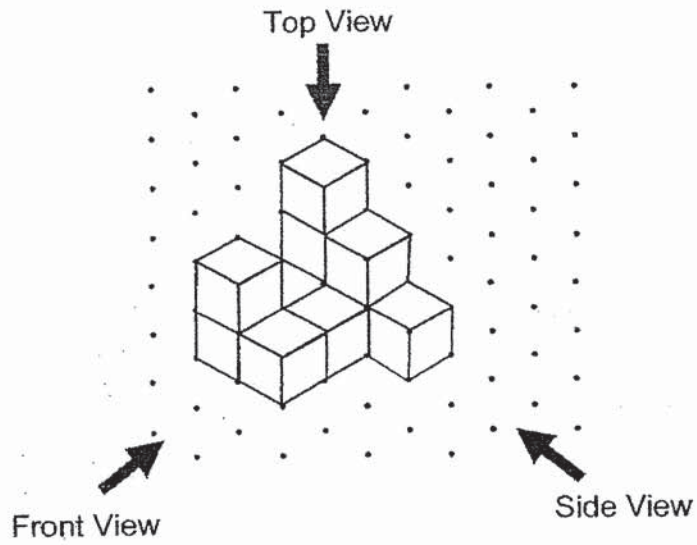
Ans: _____

25 Sharon bought $\frac{1}{2}$ kg of sugar. She used $\frac{1}{4}$ of it to bake a cake.
How much sugar had she left?

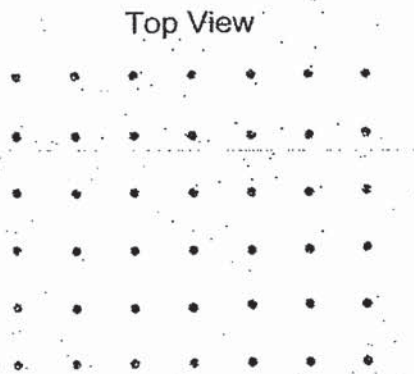
Ans: _____ kg



26 Vera stacked 10 unit cubes and glued them together to form the solid below.

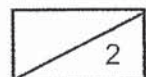


(a) Draw the top view of the solid on the grid below.



(b) Vera painted the whole solid, including the base, red.
How many of the 10 cubes had exactly five of their faces painted red?

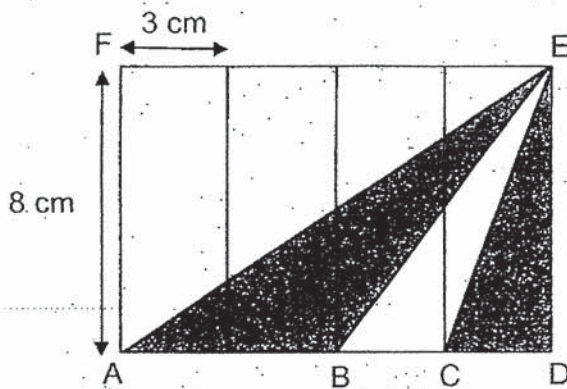
Ans: (b) _____



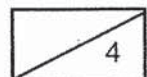
- 27 A string was cut into 3 pieces A, B and C in the ratio 2 : 6 : 5. The difference in the length of the longest and the shortest piece is 24 m. What is the length of string C?

Ans: _____ m

- 28 Rectangle ADEF is made up of 4 identical rectangles. AE, BE and CE are straight lines. Find the area of the shaded parts.



Ans: _____ cm²

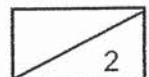


- 29 The table below shows the time taken by 4 participants in a race. All the times recorded are in whole numbers. Some of the time recorded were blocked by an ink drop.

Name	Time taken (seconds)
Arthur	5
Bradley	4
Cavin	5
Dexter	45

The average time taken by the 4 participants was 49 seconds. The difference between the time taken by Arthur and Cavin was 6 seconds. Find the shortest possible time taken by Bradley.

Ans: _____ s

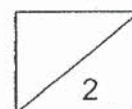


- 30 The table shows the postage rates for posting mail locally and overseas.

Mass step not over	Local Postage	Overseas Postage
First 50 g	60¢	70¢
Every additional 10 g	25¢	35¢

Mr Lim paid \$4.20 for posting a package overseas.
What was the greatest possible mass of the package that Mr Lim posted?

Ans: _____ g





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2019

END-OF-YEAR EXAMINATION

PRIMARY 5

STANDARD MATHEMATICS
PAPER 2

DURATION : 1 h 30 min

DATE : 31 OCTOBER 2019

INSTRUCTIONS

Do not open the booklet until you are told to do so.

Follow all instructions.

Answer all questions.

You are allowed to use a calculator.

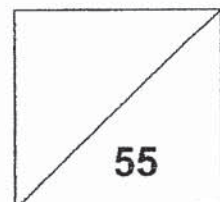
Name: _____ ()

Class: Primary 5 _____

Marks: _____

Parent's Signature : _____

Date : _____



Paper 2

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.

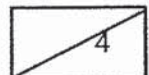
For questions which require units, give your answers in the units stated. (10 marks)

- 1 A coil of wire 980 m long is cut into equal pieces of 30 m each. What is the most number of such pieces of wire that can be cut?

Ans: _____

- 2 The original price of a refrigerator was \$600. During the Great Singapore Sale, Bala bought it at 20% discount. He paid 7% GST on the discounted price. How much did he pay for the refrigerator?

Ans: \$ _____



- 3 An excursion to the zoo was organised for 38 children. The sign below shows the price of the tickets.

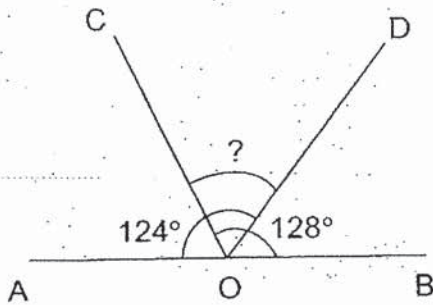
Entrance ticket
Child: \$23.50 per ticket

Promotion
Buy 5 tickets, get 1 ticket free.

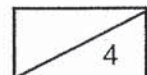
What was the total amount of money the children had to pay to enter the zoo during the promotion?

Ans: \$ _____

- 4 In the figure, AOB is a straight line. $\angle AOD$ is 124° and $\angle COB$ is 128° . Find $\angle COD$.



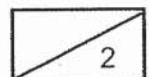
Ans: _____ $^\circ$



- 5 Peter left his house at 19 45. He took 30 minutes by bus to reach the cinema. He waited for his friend for 20 minutes. The show started once his friend arrived and ended at 22 30. How long was the show? Give your answer in hours and minutes.

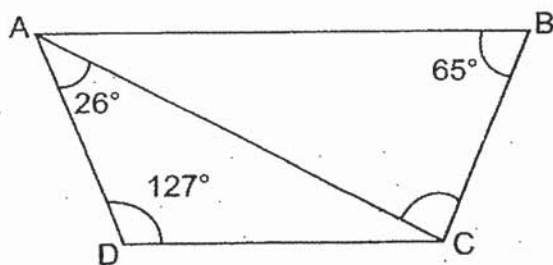
Ans: _____ h _____ min

3

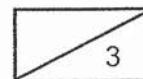


For questions 6 to 17, show your working clearly in the space provided for each question and write the answers in the spaces provided.
The number of marks available is shown in the brackets [] at the end of each question or part-question. (45 marks)

- 6 In the figure below, ABCD is a trapezium and AB is parallel to DC.
Find $\angle ACB$.

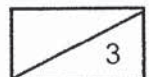


Ans: _____ [3]



- 7 Susan spent $\frac{1}{7}$ of her money and an additional \$6 on a pair of shoes. She spent $\frac{1}{5}$ of her remaining money and an additional \$8 on a dress. She had \$40 left. How much money did she have at first?

Ans: _____ [3]



- 8 Mary puts some grapes into a box and the mass of the box and grapes is 5.82 kg. Tom puts some grapes into an identical box and the mass of the box and grapes is 2.22 kg. Mary's grapes are three times as heavy as Tom's grapes. What is the mass of the box when it is empty?

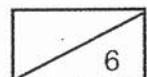
Ans : _____ [3]

- 9 Grace had thirty 20¢ coins. She also had an equal number of 10¢ and 5¢ coins. The total value of all her coins was \$11.55.

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

Statement	True	False	Not possible to tell
Grace had more 20¢ coins than 10¢ coins.			
The value of all the 5¢ coins is less than the value of all the 10¢ coins.			
Grace had fewer than 100 coins in total.			

[3]

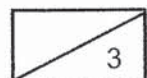


10 A taxi service charges the following rates:

Distance travelled	Charge
First kilometre or less	\$3.40
Every 400 m thereafter or less	22¢

Mrs Tan boarded a taxi from the airport and headed to the city 15 km away. There was a surcharge of \$4 from the airport. How much taxi fare did Mrs Tan pay?

Ans: _____ [3]

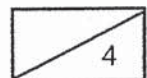


11 There are 80 participants in a competition. The average score of each participant is 58.5. The average score of the male participants is 64 and the average score of the female participants is 56.

- (a) What is the total score of the 80 participants?
- (b) How many male participants are there in the competition?

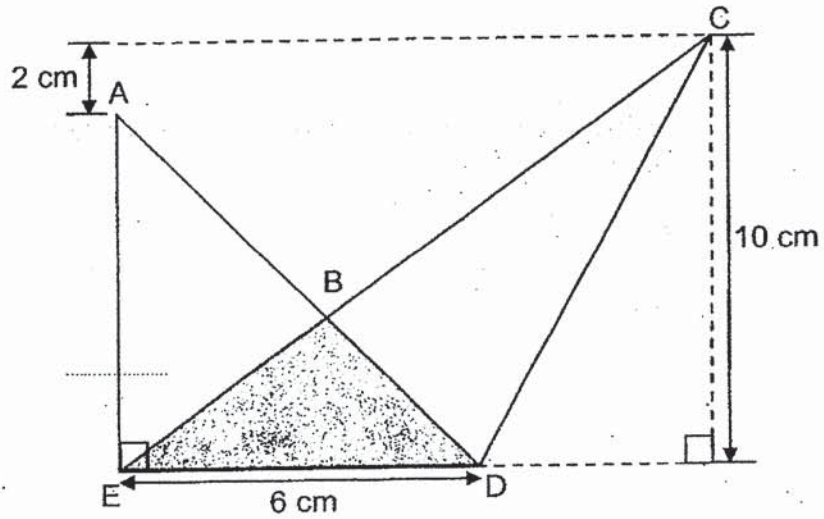
Ans: (a) _____ [2]

(b) _____ [2]



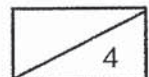
12 Figure ABCDE has an area of 36 cm^2 . ADE and CDE are triangles.

- (a) Find the area of triangle ADE.
- (b) Find the area of the shaded part.

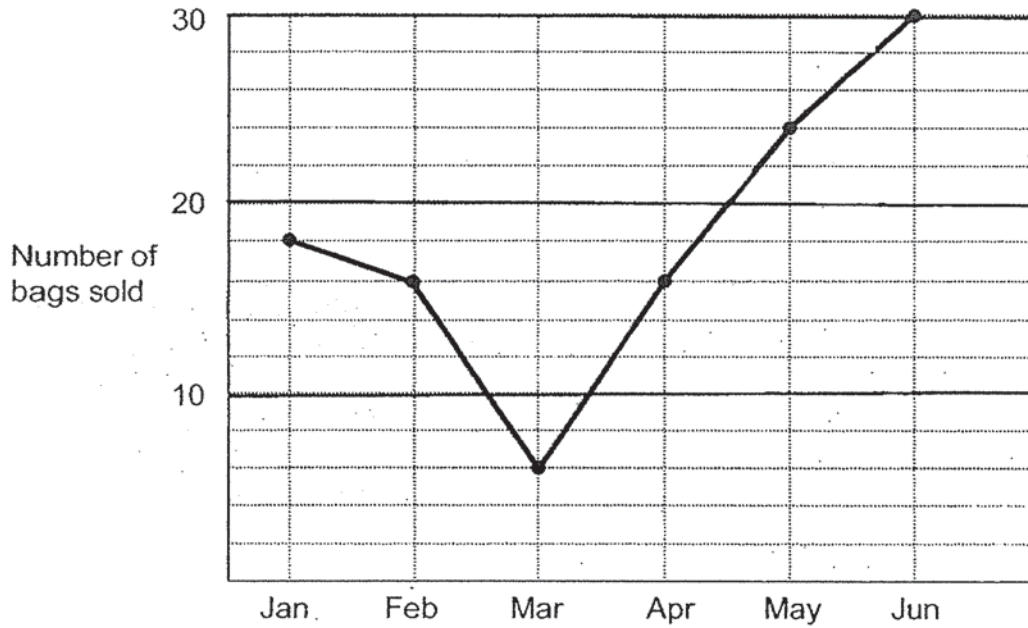


Ans: (a) _____ [2]

(b) _____ [2]



13 The line graph shows the number of bags sold from January to June.

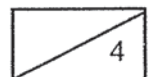


- (a) Between which 2 months was the increase in sales the greatest?
- (b) How many bags were sold from January to June?
- (c) Each bag was sold at the same price. How much was each bag sold for if a total of \$1650 was collected from the sale of all the bags?

Ans: (a) _____ and _____ [1]

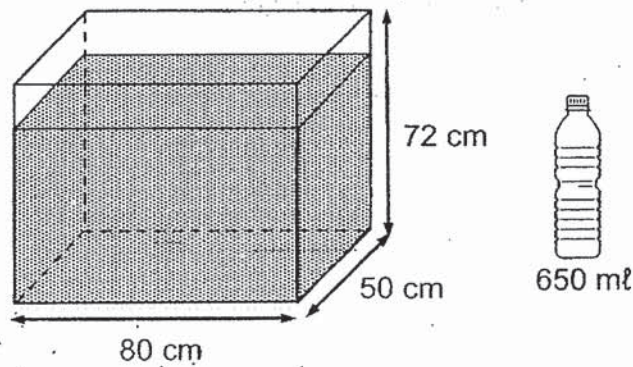
(b) _____ [1]

(c) _____ [2]



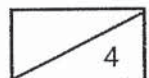
14 A rectangular tank measuring 80 cm long, 50 cm wide and 72 cm high is $\frac{7}{8}$ -filled with water.

- (a) The water in the tank is used to fill up identical bottles of capacity 650 ml each. How many such bottles can be completely filled?
- (b) How much water is left in the tank?
Give your answer in litres.



Ans: (a) _____ [2]

(b) _____ [2]

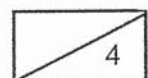


15 There was an equal number of girls and boys in the hall at first. At recess, $\frac{1}{4}$ of the boys and $\frac{1}{3}$ of the girls left the hall. The number of boys who remained in the hall was 12 more than the number of girls who remained in the hall.

- (a) What fraction of the children left the hall?
- (b) How many boys and girls were there in the hall altogether at first?

Ans: (a) _____ [2]

(b) _____ [2]

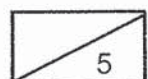


16 Melissa and Zoe bought an equal amount of flour. Each day, Melissa used 3.5 kg of flour and Zoe used 2.4 kg more than Melissa. When Melissa had 16.8 kg of flour left, Zoe had 4.8 kg of flour left.

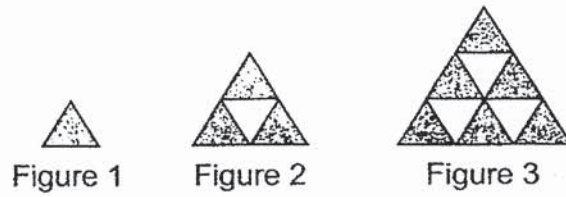
- (a) How many days did they use the flour?
- (b) How much flour did each of them have at first?

Ans: (a) _____ [3]

(b) _____ [2]



- 17 The diagram shows a sequence of patterns formed by identical triangles.



- (a) Observe the pattern and complete the table below for Figure 4.

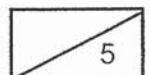
Figure Number	Number of Shaded Triangles	Number of Unshaded Triangles	Total Number of Triangles
1	1	0	1
2	3	1	4
3	6	3	9
4			

[2]

- (b) A figure in the pattern has a total of 169 triangles.
What is the Figure Number?
- (c) Another figure has 50 more shaded triangles than unshaded triangles.
What is the total number of triangles in this figure?

Ans: (b) _____ [1]

(c) _____ [2]

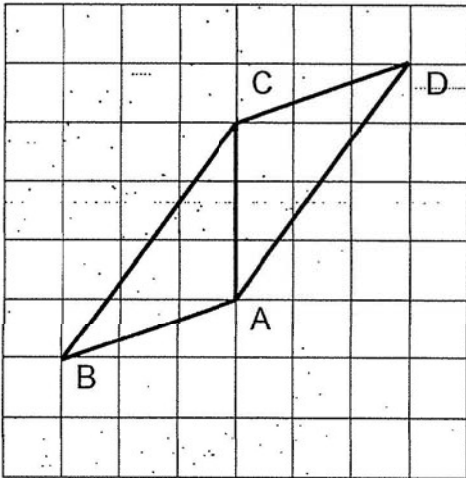


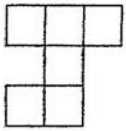
SCHOOL : Ai Tong School
 LEVEL : Primary 5
 SUBJECT : Mathematics
 TERM : SA2
 YEAR : 2019

Paper 1
Booklet A

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

Booklet B

Q16	5 010 015
Q17	900 499
Q18	24305
Q19	$\frac{2}{3}$
Q20	115°
Q21	(a) 4.5cm^2 (b) 
Q22	58
Q23	
Q24	595
Q25	$\frac{3}{8}$

Q26	(a)  (b) 3
Q27	30
Q28	36
Q29	41
Q30	15

Paper 2

Q1 $980 \div 30 = 32\frac{2}{3}$
 ≈ 32

Q2 $100\% \rightarrow 600$
 $1\% \rightarrow 6$
 $80\% \rightarrow 80 \times 6 = 480$

$100\% \rightarrow 480$
 $1\% \rightarrow 4.8$
 $107\% \rightarrow 4.8 \times 107 = 513.60$

Q3 $38 \div 6 = 6R2$
 $38 - 6 = 32$
 $32 \times 23.50 = 752$

Q4 $\angle BOB = 180^\circ - 124^\circ$
 $= 56^\circ$
 $\angle BOB = 128^\circ - 56^\circ$
 $= 72^\circ$

Q5 $1\text{h} + 20\text{min} + 5\text{min} = 1\text{h } 55\text{min}$

Q6 $180^\circ - 127^\circ - 26^\circ = 27^\circ$
 $180^\circ - 127^\circ = 53^\circ$
 $53^\circ - 26^\circ = 27^\circ$
 $180^\circ - 65^\circ - 27^\circ = 88^\circ$

Q7 4 units = $40 + 8$
= 48
1 unit = $48 \div 4$
= 12
5 units = 12×5
= 60

6 units = $60 + 6$
= 66
1 unit = $66 \div 6$
= 11
7 units = 11×7
= 77

Q8 2 units = $5.82 - 2.22$
= 3.6
1 unit = $3.6 \div 2$
= 1.8
 $2.22 - 1.8 = 0.42$

Q9 False
True
False

Q10 $4 + 3.40 = 7.4$
 $15 - 1 = 14$
 $14 \div 0.4 = 3.5$
 $35 \times 22 = 770$
 $770\text{¢} = \$7.70$
 $7.70 + 7.40 = 15.10$

Q11 (a) $58.5 \times 80 = 4680$

(b) Assume all participants are female

$1 \times 56 = 4480$
 $64 - 55 = 8$
 $4680 - 4480 = 200$
 $200 \div 8 = 25$

Q12 (a) $10 - 2 = 8$
 $\frac{1}{2} \times 6 \times 8 = 24$

(b) $36 - 24 = 12$
 $\frac{1}{2} \times 60 \times 10 = 30$
 $30 - 12 = 18$

Q13 (a) **Mar and Apr**
 (b) $8 + 16 + 6 + 16 + 24 + 30 = 110$
 (c) $1650 \div 110 = 15$

Q14 (a) $80 \times 50 \times 72 = 288\ 000$
 $\frac{7}{8} \times 288\ 000 = 252\ 000$
 $252\ 000 \div 650 = 387\frac{9}{13}$

(b) $\frac{9}{13} \times 650 = 450$

$450\text{ml} = 0.45\text{ l}$

Q15

u - units	Boys	Girls	Total
At first	12u	12u	24u
Left the hall	3u	4u	7u
Remained hall	9u	8u	

(a) $\frac{7}{24}$

(b) $9u - 8u = 1u$

$\frac{12}{1} \times 24$
 $= 288$

Q16 (a) $3.5 + 2.4 = 5.9$ (Zoe)
 $5.9 - 3.5 = 2.4$
 $16.8 - 4.8 = 12$
 $12 \div 2.4 = 5$ (days)

(b) $5 \times 3.5 = 17.5$
 $17.5 + 16.8 = 34.3$

- Q17** (a) 10, 6, 16
(b) 13
(c) $50 \times 50 = 2500$