



NANYANG PRIMARY SCHOOL

**END-OF-YEAR EXAMINATION
2023**

PRIMARY 5

**MATHEMATICS
PAPER 1
(BOOKLET A)**

Total Duration for Booklets A and B: 1 hour

Additional materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5 ()

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 In 5.687, which digit is in the hundredths place?

(1) 5

(2) 6

(3) 7

(4) 8

2 Which of the following is the same as 23 kg 52 g?

(1) 23.025 kg

(2) 23.052 kg

(3) 23.502 kg

(4) 23.520 kg

- 3 Ming Xuan bought 42 oranges, 28 mangoes and 14 kiwis from a fruit store. What was the ratio of the number of oranges to the number of mangoes to the number of kiwis that he bought? Express your answer in its simplest form.

(1) 2 : 3 : 1

(2) 2 : 4 : 6

(3) 3 : 2 : 1

(4) 6 : 4 : 2

- 4 A machine seals 120 fishball packets in 60 seconds. At this rate, how many fishball packets can it seal in 30 minutes?

(1) 3600

(2) 360

(3) 60

(4) 40

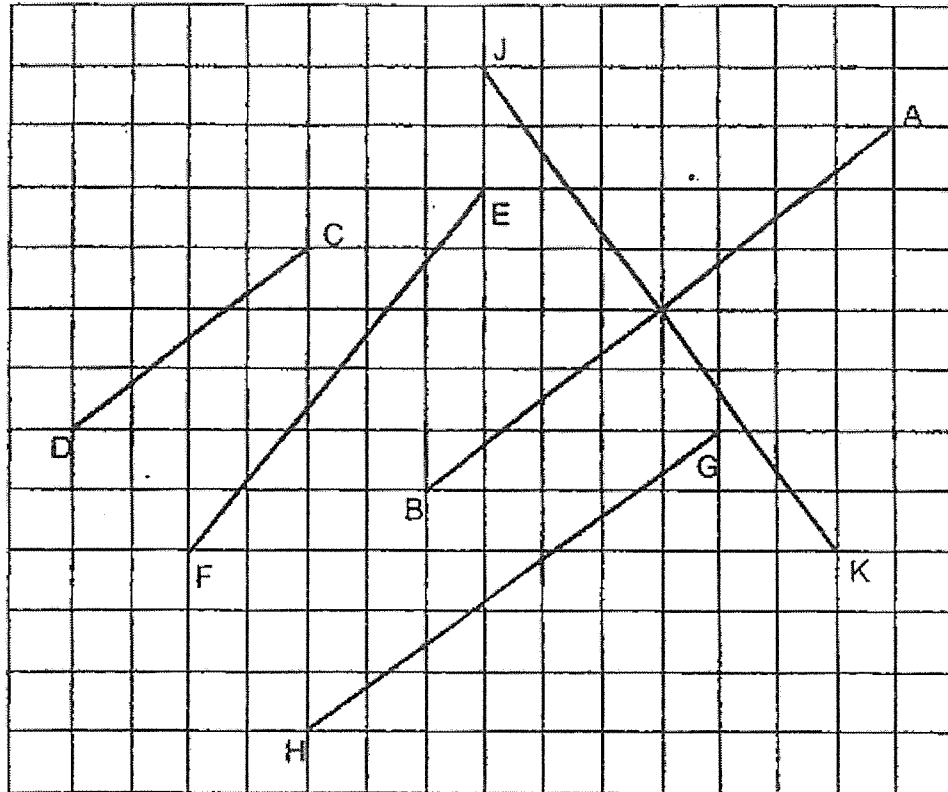
- 5 Arul had 240 stamps. He gave 60 stamps to his sister. What percentage of his stamps did Arul give to his sister?

- (1) 20%
- (2) 25%
- (3) 75%
- (4) 80%

- 6 Thomas had \$1200. He spent 35% of his money on food. How much money did he spend on food?

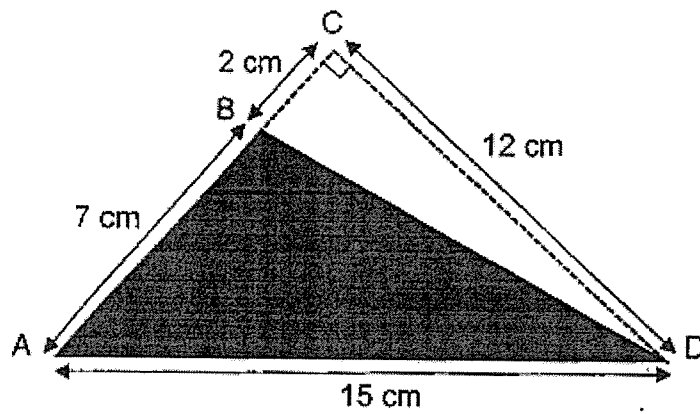
- (1) \$180
- (2) \$360
- (3) \$420
- (4) \$780

- 7 Identify the line parallel to line AB.



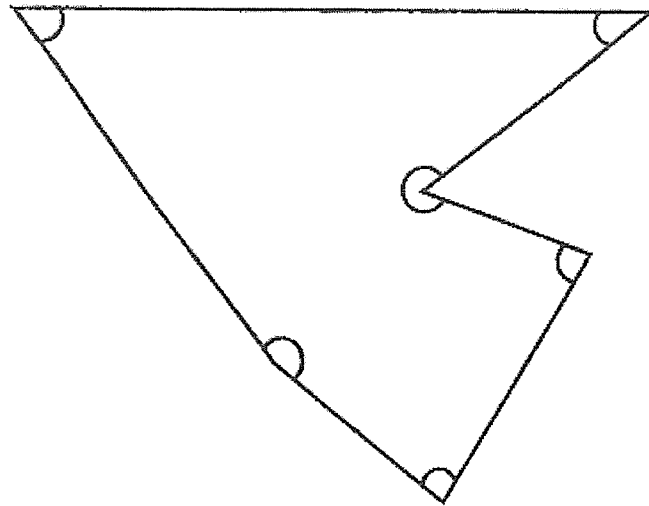
- (1) CD
- (2) EF
- (3) GH
- (4) JK

- 8 Find the area of the shaded triangle ABD.



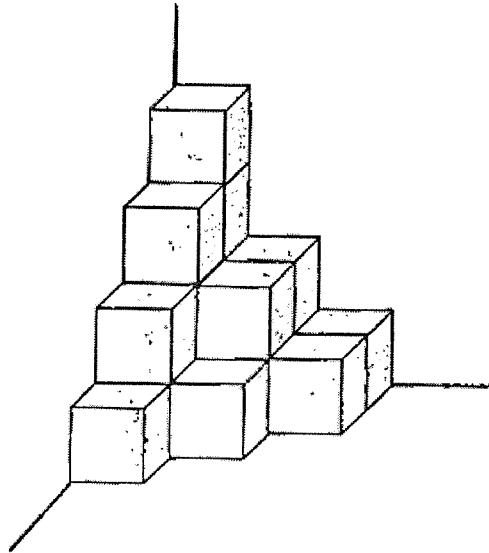
- (1) 42 cm^2
- (2) 52.5 cm^2
- (3) 54 cm^2
- (4) 84 cm^2

- 9 In the figure, how many of the six marked angles are more than 90° ?



- (1) 6
(2) 2
(3) 3
(4) 4

- 10 The figure shows a solid made up of unit cubes. How many unit cubes are needed to make the solid?



- (1) 10
(2) 12
(3) 15
(4) 17

- 11 Arrange the following fractions from the smallest to the largest.

$$\frac{8}{9}, \frac{3}{7}, \frac{4}{5}$$

- | | <u>Smallest</u> | | | | <u>Largest</u> |
|-----|-----------------|---|---------------|---|----------------|
| (1) | $\frac{8}{9}$ | , | $\frac{3}{7}$ | , | $\frac{4}{5}$ |
| (2) | $\frac{8}{9}$ | , | $\frac{4}{5}$ | , | $\frac{3}{7}$ |
| (3) | $\frac{3}{7}$ | , | $\frac{4}{5}$ | , | $\frac{8}{9}$ |
| (4) | $\frac{3}{7}$ | , | $\frac{8}{9}$ | , | $\frac{4}{5}$ |

- 12 Find the average of the following 5 numbers.

23

23

18

16

0

- (1) 23
- (2) 20
- (3) 18
- (4) 16
- 13 A factory produces 1505 kg of flour a day. The flour is packed equally into 50 packs. How much does each pack of flour weigh?

- (1) 30.1 kg
- (2) 31 kg
- (3) 300.1 kg
- (4) 301 kg

- 14 At a funfair, there were 270 people. $\frac{2}{3}$ of them were children. $\frac{2}{5}$ of the children were girls and the rest were boys. How many boys were there at the funfair?

- (1) 180
- (2) 162
- (3) 108
- (4) 72

- 15 A chef cooked some soup for 200 guests. Each guest was served 0.78 l of the soup. How much soup did the chef cook?

- (1) 14.6 l
- (2) 15.6 l
- (3) 146 l
- (4) 156 l



NANYANG PRIMARY SCHOOL

**END-OF-YEAR EXAMINATION
2023**

PRIMARY 5

**MATHEMATICS
PAPER 1
(BOOKLET B)**

Total Duration for Booklets A and B: 1 hour

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 5 ()

Booklet B

/ 25

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning paper.

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 Find the value of $198 + 35 \div 7 - (35 + 8 \div 4 \times 2)$

Ans: _____

17 Find the value of $5 \div 8$. Give your answer as a decimal.

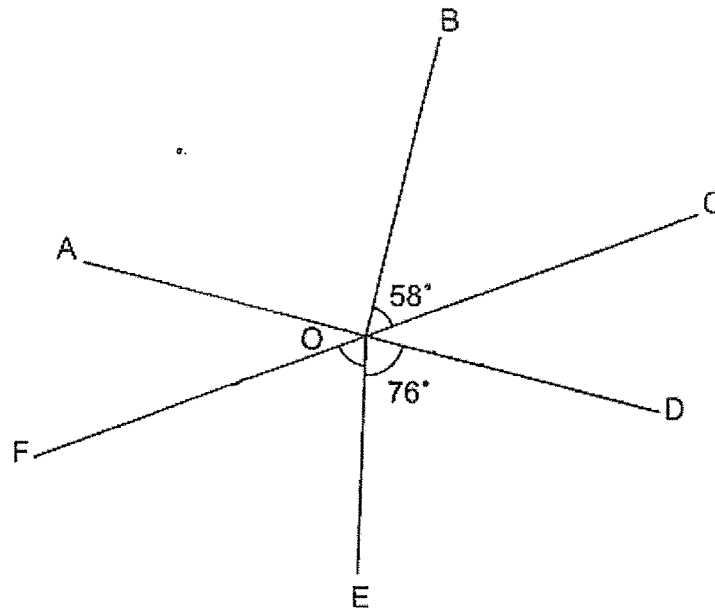
Ans: _____

18 What is the missing number in the box?

$$\square : 5 = 24 : 40$$

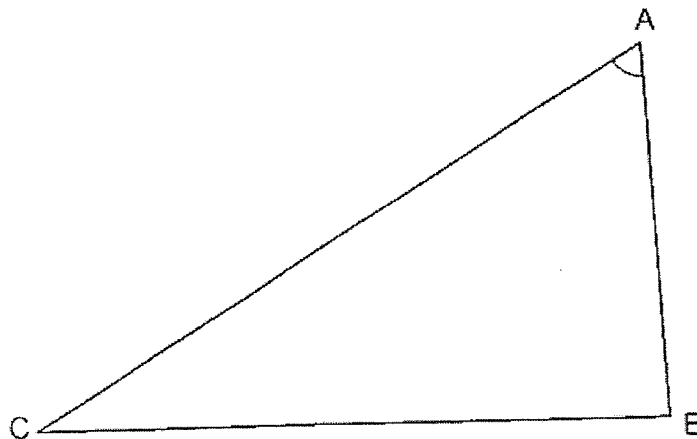
Ans: _____

- 19 In the figure below, AOD and COF are straight lines. $\angle BOC = 58^\circ$, $\angle DOE = 76^\circ$, $\angle AOB = 90^\circ$. Find $\angle FOE$.



Ans: _____°

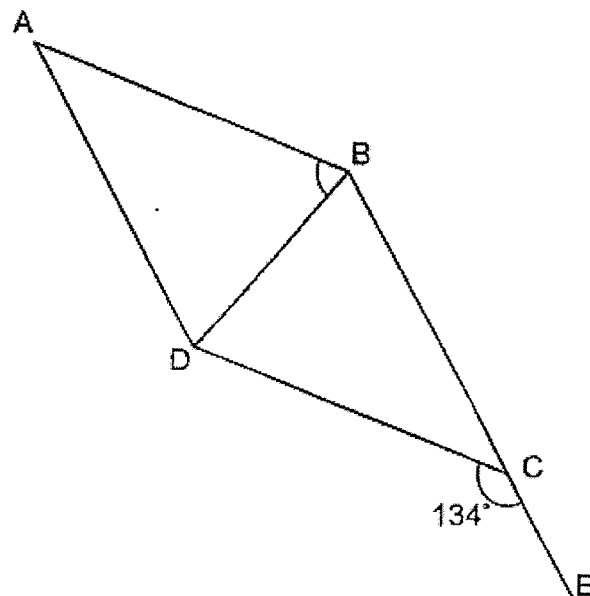
- 20 Measure and write down the size of $\angle BAC$.



Ans: _____°

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)

- 21 In the figure below, ABCD is a rhombus. BCE is a straight line and $\angle DCE = 134^\circ$. Find $\angle ABD$.



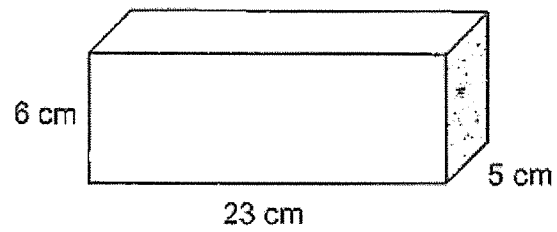
Ans: _____°

- 22 Find the value of $\frac{2}{3} \times \frac{5}{8}$

Give your answer as a fraction in the simplest form.

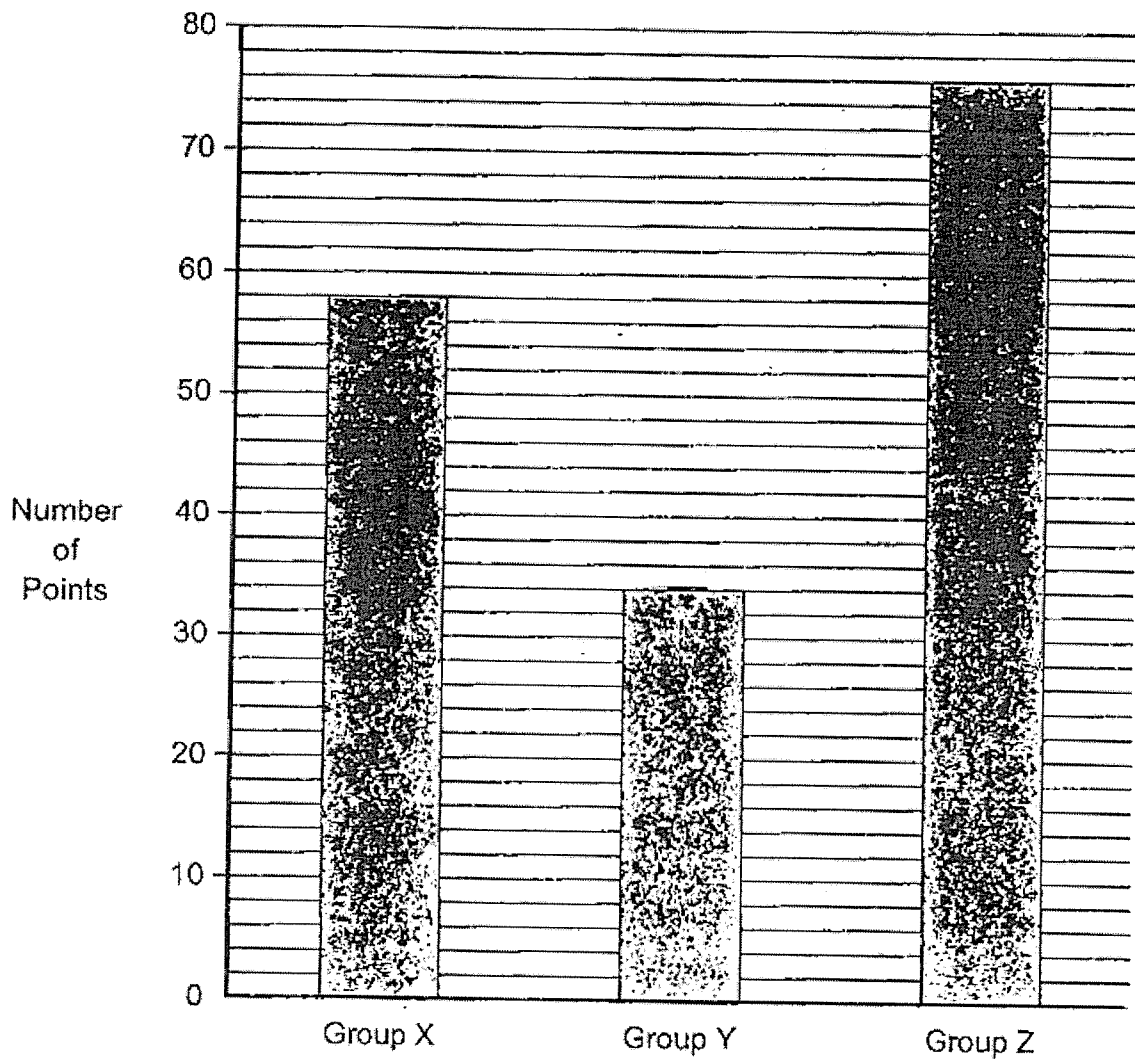
Ans: _____

- 23 What is the volume of the cuboid shown below?



Ans: _____ cm^3

- 24 The bar graph shows the group points scored by 3 groups.
What is the difference in the group points between the highest score and the lowest score?



Ans: _____

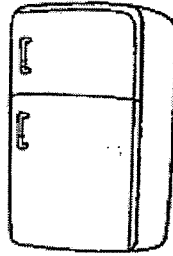
- 25 Sophia paid \$87.40 for 3 identical pencils and 7 identical markers. The price of a marker is \$1.20 more than the price of a pencil. Tim bought 10 such pencils. What was the amount of money he paid for 10 such pencils?

Ans: \$ _____

- 26 The product of 2 numbers is 3069. The smaller number is 9. Find the larger number. Round the answer to the nearest hundred.

Ans: _____

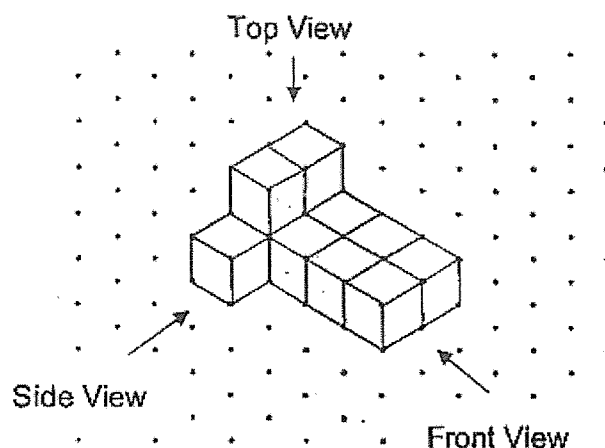
- 27 What is the price of the refrigerator after adding 8% GST?



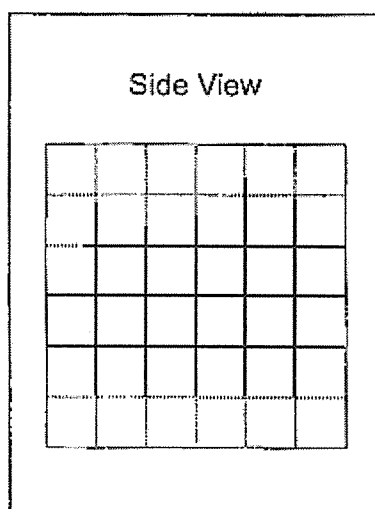
\$2800
(price before GST)

Ans: \$ _____

- 28 The figure shows a solid made up of 11 unit cubes.



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

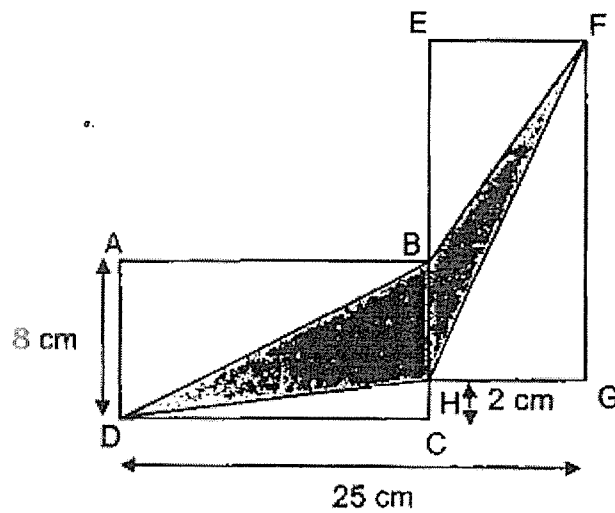


[1]

- (b) Jun Wei painted the whole solid, including the base, green. How many of the 11 unit cubes had exactly three of their faces painted green?

Ans: (b) _____ [1]

21. ABCD and EFGH are 2 identical rectangles. Find the total area of the unshaded parts.



Ans: _____ cm^2

- 30 The table below shows the height of 3 boys, Abel, Bernard and Carl. Their heights are in whole numbers. They have an average height of 154 cm. Carl is taller than Bernard and Abel is the shortest. Part of the table is smeared with ink. What is the lowest possible height of Carl?

Name	Height (cm)
Abel	146
Bernard	
Carl	1

Ans: _____ cm

End of Paper



NANYANG PRIMARY SCHOOL

**END-OF-YEAR EXAMINATION
2023**

PRIMARY 5

**MATHEMATICS
PAPER 2**

Duration: 1 hour 30 minutes

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of an approved calculator is allowed.

Name: _____ ()

Class: Primary 5 ()

Parent's Signature: _____

Booklet A	/ 20
Booklet B	/ 25
Paper 2	/ 55
Total	/ 100

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning paper.

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)

- 1 Abdul bought $5\frac{2}{5}$ m of string. He used $1\frac{3}{4}$ m of it to tie a parcel and $\frac{4}{10}$ m of it to decorate a present. How many metres of string had he left? Give your answer as a mixed number.

Ans: _____ m

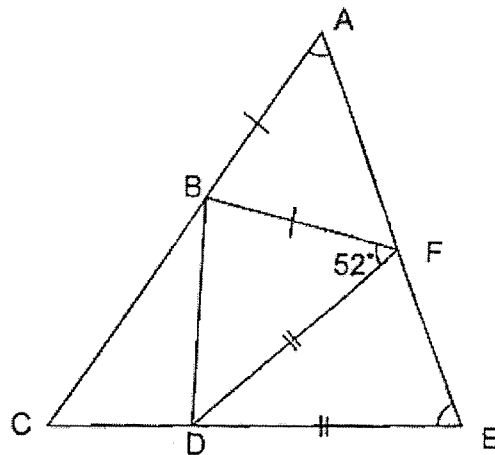
- 2 A jug contains $1\frac{7}{9}$ litres of apple juice. How many litres of apple juice are there in 6 such jugs altogether?

Ans: _____ l

- 3 The average mass of 5 children is 48 kg. When Peter's mass is added, the average mass becomes 45 kg. What is Peter's mass?

Ans: _____ kg

- 4 ACE is a triangle. Triangle ABF and triangle FDE are isosceles triangles. Find the sum of $\angle BAF$ and $\angle FED$.



Ans: _____

- 5 Mei Yan has a piece of yellow ribbon and red ribbon of the same length. She then cuts the piece of yellow ribbon and red ribbon into shorter pieces. If she gives a group of friends a shorter piece of yellow ribbon of length 1.4 m each, she will have 0.6 m of the yellow ribbon left. If she gives the same group of friends a shorter piece of red ribbon of length 1.8 m each, she will need an additional 2.2 m of the red ribbon. How many friends does Mei Yan have in this group?

Ans: _____

For questions 6 to 17, 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. (45 marks)

- 6 The total cost of 2 identical files and 3 identical markers was \$15. The total cost of 5 such files and 6 such markers was \$34.80. What was the cost of 1 such marker?

Ans: _____ [3]

- 7 Team A played against Team B in a badminton match. 560 children watched the badminton match. 70% of the children were boys.

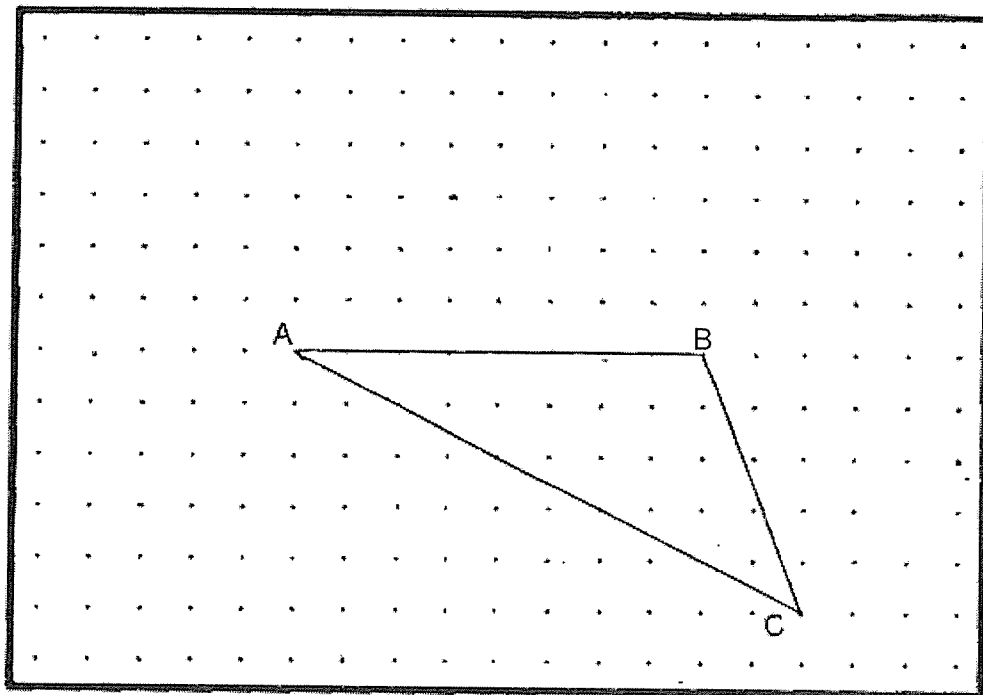
(a) How many girls watched the badminton match?

Ans: (a) _____ [1]

- (b) 42 of the girls supported Team B and the rest of the girls supported Team A. What percentage of the girls supported Team A?

Ans: (b) _____ [2]

- 8 A triangle ABC is drawn on a square grid inside a box.



By joining dots on the grid with straight lines,

- (a) draw a rhombus with BC as one of the sides. The rhombus and triangle ABC must not overlap. [1]
- (b) draw parallelogram ACFG. The length of AB is twice the length of AG. Triangle ABC must not overlap with parallelogram ACFG. [2]

- 9 Jason, Peter and Chris shared a sum of money in the ratio 5 : 9 : 2. The difference between Peter's share and Jason's share is \$128. How much more money did Peter have than Chris?

Ans: _____ [3]

- 10) The average mark for a class of students in a quiz is 74. The top 3 students scored 87, 95 and 100. When the top 3 students were excluded in the calculation for the average, the average mark becomes 62. How many students were there in the class?

Ans: _____ [3]

- 11 Ravi baked 2535 cookies. $\frac{1}{3}$ of them were chocolate cookies, $\frac{3}{5}$ of the remaining cookies were vanilla cookies and the rest were strawberry cookies.

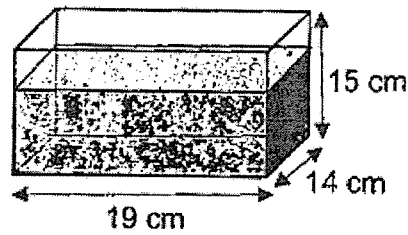
(a) How many vanilla cookies did he bake?

Ans: (a) _____ [2]

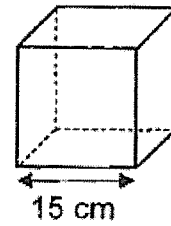
- (b) Ravi packed all the vanilla cookies into large and small tins to sell. He filled each large tin with 30 cookies and each small tin with 12 cookies. All the tins were full and there were no cookies left over. What was the least number of tins used by Ravi?

Ans: (b) _____ [2]

- 12 A rectangular tank measuring 19 cm by 14 cm by 15 cm is $\frac{2}{3}$ -filled with water. All the water is then poured into an empty cubical tank with sides measuring 15 cm each.



Rectangular Tank



Cubical Tank

- (a) What is the volume of water in the rectangular tank at first?

Ans: (a) _____ [1]

- (b) How much more water has to be added so that the cubical tank is $\frac{4}{5}$ -filled with water? Give your answer in litres.

Ans: (b) _____ [3]

- 13 Keryn and Carol had an equal number of stickers at first. After Keryn used 352 stickers and Carol used 84 stickers, Carol had 5 times as many stickers as Keryn.

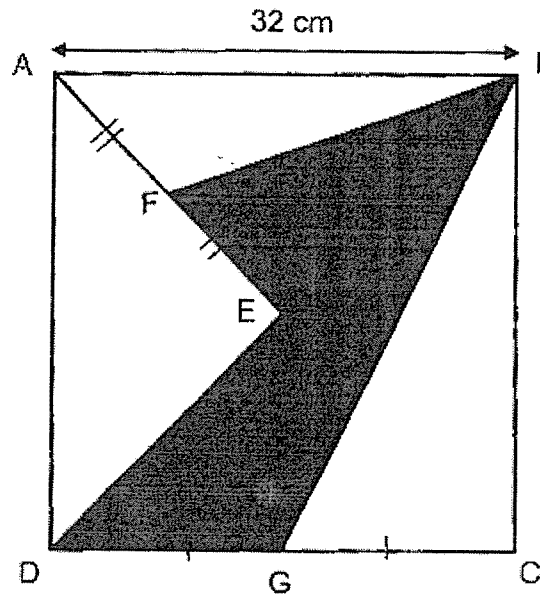
(a) How many stickers did Keryn have left?

Ans: (a) _____ [2]

(b) How many stickers did each girl have at first?

Ans: (b) _____ [2]

- 14 ABCD is a square. $AB = 32$ cm, $DG = GC$ and $AF = FE$ and $DE = EB$.



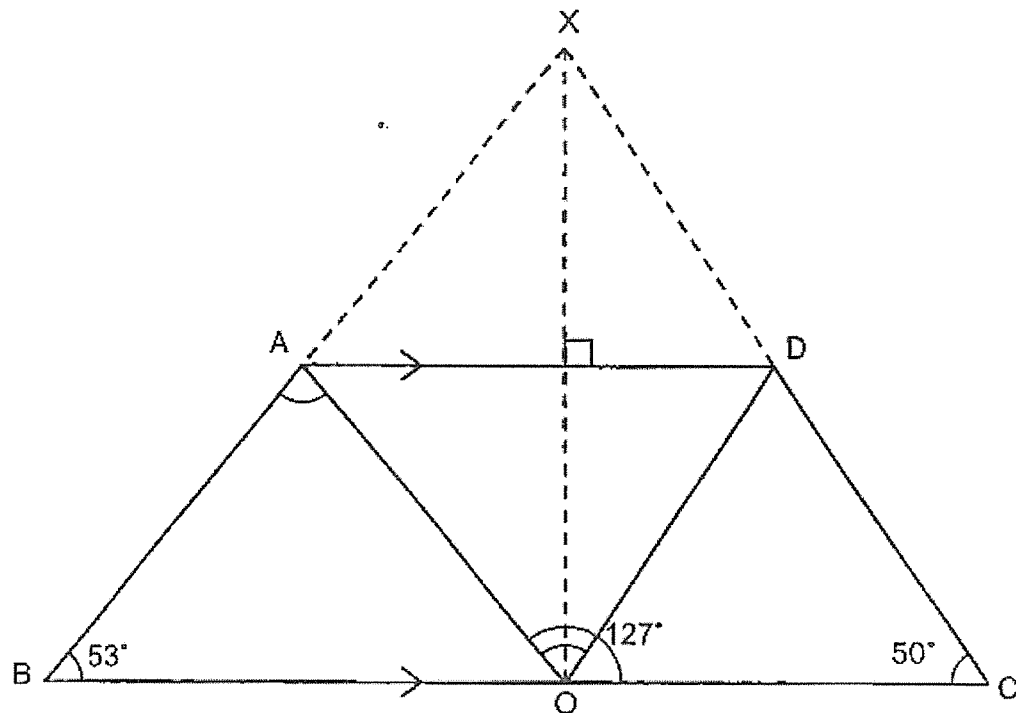
- (a) Find the area of the triangle BDG.

Ans: (a) _____ [1]

- (b) Find the area of the shaded parts.

Ans: (b) _____ [3]

- 15 A piece of triangular paper is folded into a trapezium as shown in the diagram below. $\angle ABO = 53^\circ$, $\angle DCO = 50^\circ$ and $\angle AOC = 127^\circ$.



(a) Find $\angle AOD$.

Ans: (a) _____ [2]

(b) Find $\angle BAO$.

Ans: (b) _____ [2]

- 16 The table shows the parking charges at Value Shopping Mall.

Parking Charges	
9 a.m. to 5 p.m. For the first hour or part thereof	\$1.20
For every additional $\frac{1}{2}$ hour or part thereof	\$1.00
After 5 p.m. till next morning 9 a.m.	\$5.00 per entry

- (a) Mrs Wee parked her car from 9.30 a.m. to 11.45 a.m. How much did she pay for her parking charges?

Ans: (a) _____ [2]

- (b) Mr Ong parked his car from 4.30 p.m. till the next morning 9 a.m. How much did he pay for his parking charges?

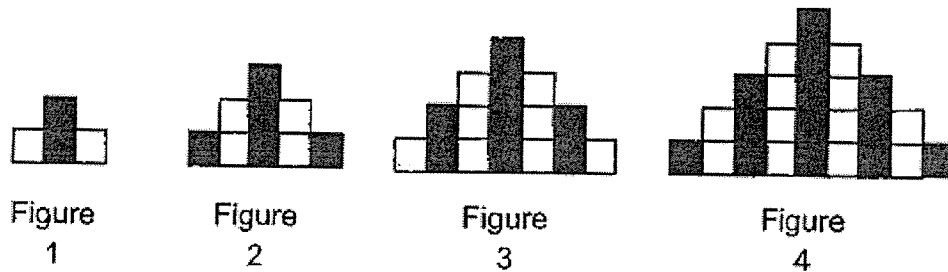
Ans: (b) _____ [1]

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

Statement	True	False	Not possible to tell
Mr Lim paid \$5 when he parked his car from 6 p.m. till next morning 8.45 a.m.			
Mr Tan paid \$1.20 when he parked his car for 30 minutes.			
Some cars entered at 6 p.m. and exited at 6.50 p.m. on the same day. The parking charges for these cars were \$7.20.			

[2]

- 17 Bryan uses grey and white squares to form figures that follow a pattern as shown below.



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

Figure Number	1	2	3	4	5
Number of grey squares	2	5	8	13	
Number of white squares	2	4	8	12	
Total number of squares	4	9	16	25	

[1]

- (b) Find the number of white squares in Figure 8.

Ans: (b) _____ [2]

(c) Find the total number of squares in Figure 49.

Ans: (c) _____ [2]

End of Paper



NANYANG PRIMARY SCHOOL
END-OF-YEAR EXAMINATION
2023

PRIMARY 5
MATHEMATICS
PAPER 1
(BOOKLET A)

Total Duration for Booklets A and B: 1 hour
 Additional material: Optical Answer Sheet (OAS)

INSTRUCTIONS TO PUPILS

- Do not turn over this page until you are told to do so.
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- Write your answers in the Optical Answer Sheet (OAS) provided.
- The use of calculators is **NOT** permitted.

Name: _____
 Class: Primary 5 ()

5. Ann had 240 stamps. She gave 40 stamps to her sister. What percentage of the stamps did Ann give to her sister?

$$\frac{40}{240} \times \frac{1}{4} = 25\%$$

$$\text{or } \frac{1}{4} \times 100\% = 25\%$$

(2)

6. Thomas had \$1200. He spent 25% of his money on food. How much money did he spend on food?

$$1\% \rightarrow \$1200 \div 100 = \$12$$

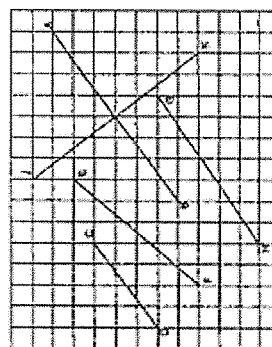
$$25\% \rightarrow \$12 \times 25 = \$300$$

(3)

- (1) 50
 (2) 60
 (3) 84
 (4) 48

(1)

7. Verify the time period in the AB.



- (1) 50
 (2) 60
 (3) 84
 (4) 48

(1)

Directions: In 10 days, I want to read 100 pages. I have 10 days to read. How many pages should I read each day? Write the correct answer. (2 marks)

1. In 10 days, I want to read 100 pages. I have 10 days to read. How many pages should I read each day? Write the correct answer. (2 marks)

- (1) 10
 (2) 100
 (3) 1000
 (4) 10000

(1)

2. What is the value of the following? (2 marks)

- (1) 23.025 kg
 (2) 23.042 kg
 (3) 23.012 kg
 (4) 23.022 kg

(2)

3. Ming bought 12 oranges, 24 mangoes and 16 lemons for \$10. What was the ratio of the number of mangoes to the number of lemons to the number of oranges that he bought? Express your answer in its simplest form.

$$12 : 24 : 16$$

$$\div 4 \rightarrow 3 : 6 : 4$$

(3)

4. A rectangle with 120 sides is divided into 10 squares. All the sides are equal. What is the area of the rectangle? (2 marks)

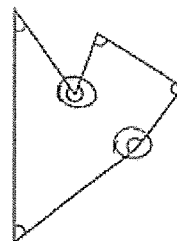
$$120 \div 10 = 12$$

$$12 \times 12 = 144$$

(1)

1

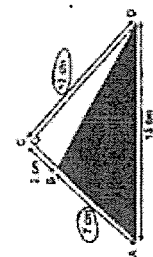
5. In the figure, how many of the rectangles are more than 100 cm?



- (1) 2
 (2) 3
 (3) 4
 (4) 5

(2)

6. Find the area of the shaded triangle ABC.



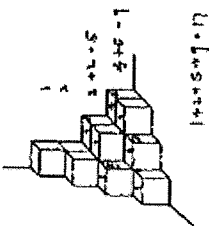
$$\frac{1}{2} \times 10 \times 15 = 75$$

(1)

- (1) 42 cm²
 (2) 52.5 cm²
 (3) 34 cm²
 (4) 44 cm²

(1)

14 This figure shows a solid made up of unit cubes. How many unit cubes are needed to make the solid?



$$1+2+5+9=17$$

- (1) 10
(2) 12
(3) 18
(4) 17

(4)

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

$$\frac{1}{2}, \frac{2}{3}, \frac{1}{4}$$

Smallest	Largest
(1) $\frac{1}{2}$	$\frac{1}{4}$
(2) $\frac{1}{3}$	$\frac{2}{3}$
(3) $\frac{1}{4}$	$\frac{1}{2}$
(4) $\frac{2}{3}$	$\frac{1}{3}$
(5) $\frac{1}{2}$	$\frac{1}{4}$
(6) $\frac{2}{3}$	$\frac{1}{3}$

$$\frac{1}{2} < \frac{1}{3} < \frac{2}{3}$$

$$\frac{1}{4} < \frac{1}{3} < \frac{2}{3}$$

$$\frac{1}{2} < \frac{1}{4} < \frac{2}{3}$$

(4)

$$\frac{1}{2} < \frac{1}{3} < \frac{2}{3}$$

Smallest $\frac{1}{4}, \frac{1}{3}, \frac{2}{3}$ Largest

16 Find the average of the following 5 numbers.

23	23	18	16	0
----	----	----	----	---

$$\frac{23+23+18+16+0}{5} = 16$$

- (1) 23
(2) 20
(3) 18
(4) 16

(4)

17 A factory produces 1500 kg of flour a day. The flour is packed equally into 30 bags. How much flour does each bag of flour weigh?

$$1500 \div 30 = 50 \text{ kg}$$

(1)

18 At a book fair, there were 270 people. $\frac{2}{3}$ of them were children. $\frac{1}{3}$ of the children were girls and the rest were boys. How many boys were there at the book fair?



$$270 \times \frac{2}{3} = 180$$

$$180 \div 2 = 90$$

$$270 - 90 = 180$$

(3)

19 A school cooked some soup for 300 pupils. Each pupil was served 8.75 L of the soup. How much soup did the school cook?

$$300 \times 8.75 = 2625 \text{ L}$$

$$2625 \div 1000 = 2.625 \text{ kL}$$

$$2.625 \text{ kL} = 2625 \text{ L}$$

(4)

2023, May 1
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 asked.

16 Find the value of $100 + 35 - 7 - (25 + 15 + 2)$.

$$100 + 35 - 7 - (25 + 15 + 2)$$

$$= 100 + 35 - 7 - 42$$

$$= 100 + 35 - 49$$

$$= 100 - 14$$

$$= 86$$

Ans: 86

17 Find the value of $8 - 8$. Give your answer as a decimal.

$$\frac{8}{1000} = 0.008$$

$$8 - 8 = 0$$

Ans: 0.008

18 What is the missing number in the box?

$$15 + 25 = 40$$

$$25 + 3 = 28$$

Ans: 28

NANYANG PRIMARY SCHOOL
END-OF-YEAR EXAMINATION
2023
PRIMARY 6
MATHEMATICS
PAPER 1
(BOOKLET B)

Total Duration for Booklets A and B: 1 hour

INSTRUCTIONS TO PUPILS

- Do not turn over this page until you are told to do so.
- Follow all instructions carefully.
- Answer all questions.
- Write your answers in the booklet.
- The use of calculators is **NOT** allowed.

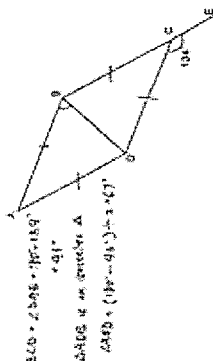
Name: _____
Class: Primary 6 ()

Booklet B 1/28

Please sign and return the examination paper for mark entry. Any queries should be raised at the same time when returning paper.

Questions 21 to 26 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 unit in brackets.

21 In the figure below, $\angle AOC$ is a straight line, $\angle BCE$ is a straight line and $\angle OCB = 150^\circ$. Find $\angle ADE$.



Ans: 67

22 Find the value of $\frac{1}{3} \times \frac{5}{6}$.

One your answer as a fraction in its simplest form.

$$\frac{1}{3} \times \frac{5}{6} = \frac{5}{18}$$

Ans: $\frac{5}{18}$

23 What is the price of the rectangular silver box, 1% GST?



13000 (before GST)

$$\begin{aligned} 100\% &\rightarrow \$13000 \\ 1\% &\rightarrow \$13000 \div 100 = \$130 \\ 108\% &\rightarrow \$13000 + \$130 = \$13130 \\ 8\% &\rightarrow \$13130 \times \frac{8}{100} = \$1050.40 \\ &= \$12279.60 \end{aligned}$$

$$\$12279.60 + \$1224 = \$13503.60$$

Ans: \$13503.60

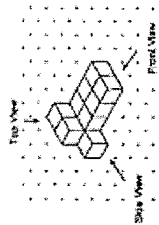
24 What is the volume of the object shown below?



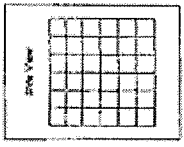
$$\text{Volume} \rightarrow 6 \times 22 \times 5 = 660$$

Ans: 660 cm³

25 The figure shows a solid made up of 13 unit cubes.



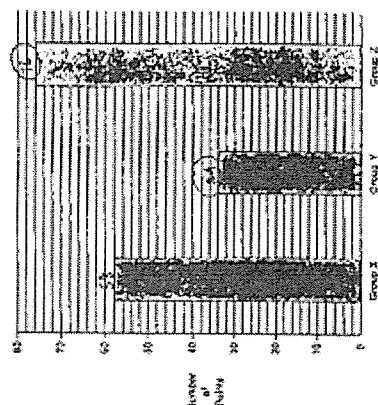
(a) Draw the side view of the solid on the grid below.



(b) Jan Mei painted the entire solid, including the base, green. How many of the 13 unit cubes had exactly three of their faces painted green?

Ans: (b) 5

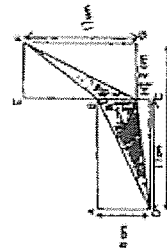
26 The bar graph shows the prices of 3 types of books. What is the difference in the price of the most expensive and the least expensive?



$$76 - 24 = 52$$

Ans: 52

27 ABCD and EFGH are 2 identical rectangles. Find the total area of the shaded parts.



$$\begin{aligned} \text{Area of } ABCD &= 24 \times 12 = 288 \\ \text{Area of } EFGH &= 24 \times 12 = 288 \\ \text{Area of } ABCE &= 24 \times 12 = 288 \\ \text{Area of } EFGH &= 24 \times 12 = 288 \\ \text{Area of } ABCD &= 24 \times 12 = 288 \\ \text{Area of } EFGH &= 24 \times 12 = 288 \end{aligned}$$

Ans: 192

28 Sports paid \$37.40 for 3 tickets for hockey and 7 basketball matches. The price of a hockey ticket is \$1.20 more than the price of a basketball ticket. How much more money did Sports pay for the basketball tickets than for the hockey tickets?

	Hockey	Basketball
1	1.20	1.20
2	1.20	1.20
3	1.20	1.20
4	1.20	1.20
5	1.20	1.20
6	1.20	1.20
7	1.20	1.20
8	1.20	1.20
9	1.20	1.20
10	1.20	1.20

Ans: \$1.20

29 The product of 2 numbers is 2008. The smaller number is 8. Find the larger number. Round the answer to the nearest hundred.

$$2008 \div 8 = 251$$

Ans: 250

30 The table below shows the height of 3 boys. Find the average height of the 3 boys. Give your answer in cm.

Boy	Height (cm)
Boy 1	145
Boy 2	150
Boy 3	155

$$\text{Sum of heights} = 145 + 150 + 155 = 450$$

$$\text{Average height} = 450 \div 3 = 150$$

$$\text{Average height} = 150 \text{ cm}$$

$$\text{Average height} = 150 \text{ cm}$$

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$$\text{Average height} = 150 \text{ cm}$$

$$\text{Average height} = 150 \text{ cm}$$

Ans: 150

End of Paper

INSTRUCTIONS TO PUPILS

- 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 allowed.

Name: _____

Class: Primary 5 ()

Pupil's Signature: _____

Booklet A	/20
Booklet B	/25
Paper 2	/25
Total	/100

Please sign and return the examination paper the next day. Any Quizzes should be marked at the same time when returned paper.

5. Mei Yee has a piece of yellow cloth and red cloth of the same length. She has cut the yellow cloth into 4 equal pieces. If the short piece of yellow cloth is a square piece of length 1.4 m each, she will have 0.4 m of the yellow cloth left. She has the same piece of yellow cloth as a square piece of red cloth of length 1.8 m each. She will need an additional 2.3 m of the red cloth. How many hands does Mei Yee have in the group?

$1.8 - 1.4 = 0.4$
 $2.3 - 0.4 = 1.9$
 $1.9 \div 0.4 = 4.75$

Ans: 7

For questions 6 to 7, 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 sub-question.

6. The total cost of 2 basketballs and 3 basketball hoops was \$115. The total cost of 5 such balls and 3 such hoops was \$245. What was the cost of 1 such basket?

$2B + 3H \rightarrow 115$
 $5B + 3H \rightarrow 245$
 $3B \rightarrow 130$
 $B \rightarrow 43.33$

7. For questions 8 to 11, 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 sub-question.

8. The total cost of 2 basketballs and 3 basketball hoops was \$115. The total cost of 5 such balls and 3 such hoops was \$245. What was the cost of 1 such basket?

$2B + 3H \rightarrow 115$
 $5B + 3H \rightarrow 245$
 $3B \rightarrow 130$
 $B \rightarrow 43.33$

7. Team A played against Team B in a basketball match. 320 children watched the basketball match. 70% of the children were boys.

(a) How many girls watched the basketball match?

$100\% - 70\% = 30\%$
 $320 \times 30\% = 96$
 Ans: 96

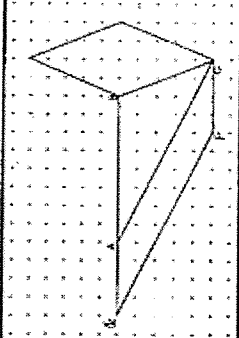
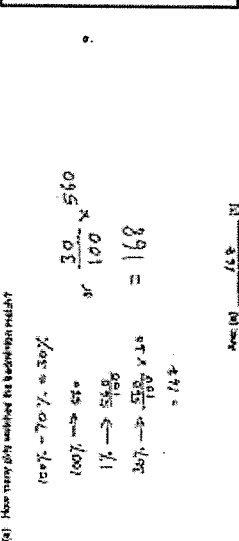
(b) 45 of the girls supported Team B and the rest of the girls supported Team A. What percentage of the girls supported Team A?

$320 - 96 = 224$
 $224 - 45 = 179$
 $179 \div 224 = 79.9\%$
 Ans: 79.9%

8. A figure ABCD is shown on a square grid. Each side of the square is 1 unit long.

(a) Draw a rhombus with AC as one of its diagonals. The rhombus and figure ABCD must not overlap.

(b) Draw parallelogram ACDE. The length of DE is twice the length of AC. Triangle ABC must not overlap with parallelogram ACDE.

By plotting dots on the grid with straight lines.
 (a) 
 (b) 

9. The average mass of 5 children is 40 kg. When Peter's mass is added, the average mass becomes 45 kg. What is Peter's mass?

$40 \times 5 = 200$
 $45 \times 6 = 270$
 $270 - 200 = 70$
 Ans: 70

10. ABC is a triangle. Triangle ABE and triangle FDE are isosceles triangles. Find the sum of $\angle DAF$ and $\angle FDE$.

$\angle DAF = \angle FDE$
 $\angle FDE = \angle FDE$
 $\angle DAF + \angle FDE = 180^\circ - 50^\circ = 130^\circ$
 Ans: 130

11. A box contains $\frac{1}{2}$ litre of apple juice. How many litres of apple juice are there in 8 such boxes altogether?

$\frac{1}{2} \times 8 = 4$
 Ans: 4

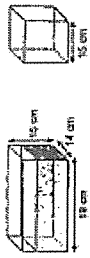
12. A box contains $\frac{1}{2}$ litre of apple juice. How many litres of apple juice are there in 8 such boxes altogether?

$\frac{1}{2} \times 8 = 4$
 Ans: 4

13. A box contains $\frac{1}{2}$ litre of apple juice. How many litres of apple juice are there in 8 such boxes altogether?

$\frac{1}{2} \times 8 = 4$
 Ans: 4

12. A rectangular tank measuring 18 cm by 14 cm by 15 cm is $\frac{2}{3}$ filled with water. All the water is then poured into an empty cubical tank with side measuring 15 cm each.



Rectangular Tank

Cubical Tank

- (a) What is the volume of water in the rectangular tank at first?
 Ans: (a) $\frac{2}{3} \times 18 \times 14 \times 15 = 4200$
 (b) How much more water has to be added so that the cubical tank is $\frac{2}{3}$ filled with water? Give your answer in cm^3 .
 Ans: (b) $4200 - 4200 = 0$

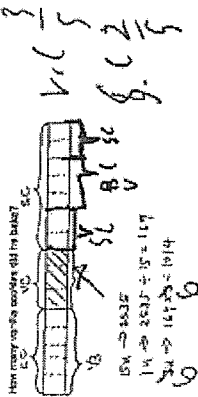
$$\frac{2}{3} \times 15 \times 15 \times 15 = 2250$$

$$2250 - 4200 = -1950$$

$$1950 \text{ cm}^3$$

Ans: (a) 4200 (b) 1950

13. How many stickers did the boy have at first?
 Ans: (a) 1014



- (b) How many stickers did the boy have at first?
 Ans: (b) 1014

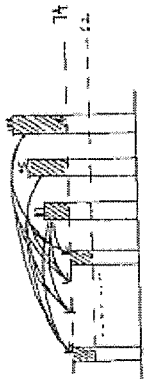
$$1014 \div 30 = 33.8$$

$$33.8 \times 12 = 405.6$$

$$405.6 \times 2 = 811.2$$

Ans: (a) 1014 (b) 811.2

14. The average mark for a class of students is 74. The top 3 students scored 87, 85 and 83. How many students were in the class?
 Ans: (a) 24



- (b) How many students were in the class?
 Ans: (b) 24

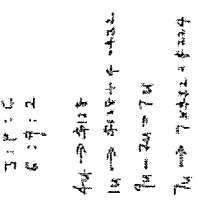
$$74 \times 24 = 1776$$

$$1776 - (87 + 85 + 83) = 1521$$

$$1521 \div 63 = 24$$

Ans: (a) 24 (b) 24

15. Jason, Peter and Chris shared a sum of money in the ratio 3:5:2. The difference between Peter's share and Jason's share is \$128. How much more money did Peter have than Chris?
 Ans: (a) \$128



- (b) How much more money did Peter have than Chris?
 Ans: (b) \$128

$$3x + 5x + 2x = 10x$$

$$5x - 3x = 2x = 128$$

$$2x = 128$$

$$x = 64$$

$$2x = 128$$

Ans: (a) \$128 (b) \$128

16. How many stickers did the boy have at first?
 Ans: (a) 1014



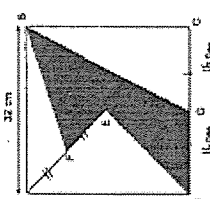
$$1014 \div 30 = 33.8$$

$$33.8 \times 12 = 405.6$$

$$405.6 \times 2 = 811.2$$

Ans: (a) 1014 (b) 811.2

17. ABCD is a square. AB = 12 cm. DS = 10 cm and AF = 8 cm. DE = 6 cm. Find the area of the triangle BDE.
 Ans: (a) 36



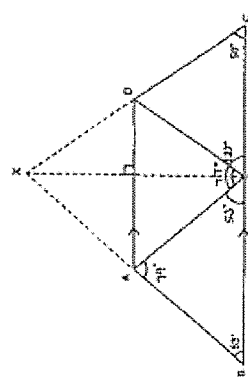
- (b) Find the area of the triangle BDE.
 Ans: (b) 36

$$12 \times 12 = 144$$

$$144 - (10 \times 12 + 8 \times 12 + 6 \times 12) = 36$$

Ans: (a) 36 (b) 36

18. A piece of triangular paper is folded into a shape as shown in the diagram below. $\angle ADB = 55^\circ$, $\angle BDC = 55^\circ$ and $\angle DCE = 120^\circ$. Find $\angle AEC$.
 Ans: (a) 77



- (b) Find $\angle AEC$.
 Ans: (b) 77

$$\angle AEC = 180^\circ - 55^\circ - 55^\circ = 70^\circ$$

$$\angle AEC = 70^\circ$$

Ans: (a) 77 (b) 70

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

Statement	True	False	Not possible to tell
Mr Lim paid \$5 when he parked his car from 8 p.m. till noon, starting 8.45 a.m.	✓		
Mr Tan paid \$1.25 when he parked his car for 30 minutes.			✓
Some cars entered at 8 p.m. and exited at 8.20 p.m. on the same day. The parking charges for these cars were \$1.20.		✓	

15

- 17) Bryan uses grey and white squares to form figures that follow a pattern as shown below.



- (a) The table shows the number of grey and white squares for the first four figures. Complete the table for figures 5.

Figure number	1	2	3	4	5
Number of grey squares	1	3	5	7	9
Number of white squares	2	5	8	11	14
Total number of squares	3	8	13	18	23

- (b) Find the number of white squares in figure 5.

$$\begin{aligned} 14 + 7 &= 21 \\ 21 + 2 &= 23 \\ 23 - 8 &= 15 \\ 15 \times 1 &= 15 \\ 15 - 1 &= 14 \end{aligned}$$

Ans (b) 14

- 18) Find the total number of squares in Figure 46.

$$\begin{aligned} 47 + 1 &= 48 \\ 48 \times 46 &= 2208 \end{aligned}$$

Ans (a) 2208

End of Paper