HENRY PARK PRIMARY SCHOOL
2025 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 1
(BOOKLET A)

Name: _____ ( ) Parent's Signature

Class: Primary 6_____ _____

Marks:

Paper 1	Booklet A	20
	Booklet B	25
Paper 2		55
Total		100

Total Time for Booklets A and B: 1 hour

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

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 in the Optical Answer Sheet.

(20 marks)

---

1 Round 309 499 to the nearest thousand.

(1) 300 000

(2) 309 000

(3) 309 500

(4) 310 000

2 $70 + \frac{7}{10} + \frac{7}{100} =$?

What is the missing number in the box?

(1) 70.077

(2) 70.77

(3) 77.07

(4) 77.7

3 Find the value of $72 - 4 \times 3 + 24$

(1) 1836

(2) 228

(3) 84

(4) 36

4 A musical started at 18 35 and ended at 20 20. What was the duration of the musical?

(1) 105 min

(2) 115 min

(3) 145 min

(4) 185 min

(Go on to the next page)

5 The table shows the number of students who wear and do not wear spectacles.

	Wear spectacles	Do not wear spectacles
Boys	5	2
Girls	15	3

What percentage of the students do **not** wear spectacles?

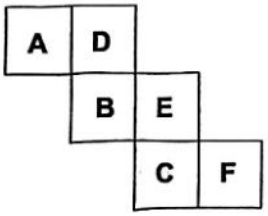
(1) 60%

(2) 25%

(3) 20%

(4) 5%

6 The net of a cube is shown. Which 2 faces are opposite each other?



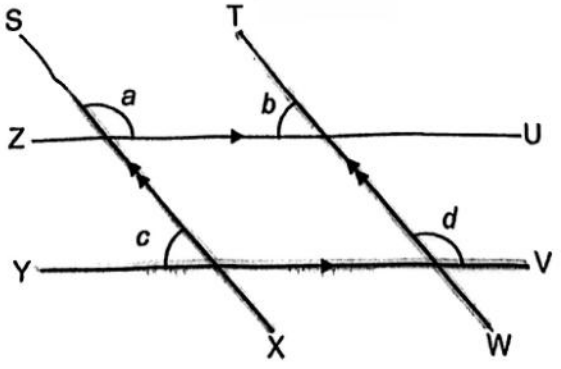
(1) A and B

(2) B and E

(3) D and F

(4) C and D

7 SX, TW, ZU and YV are straight lines. Which pair of angles does **not** add up to 180°?



(1) $\angle a + \angle b$

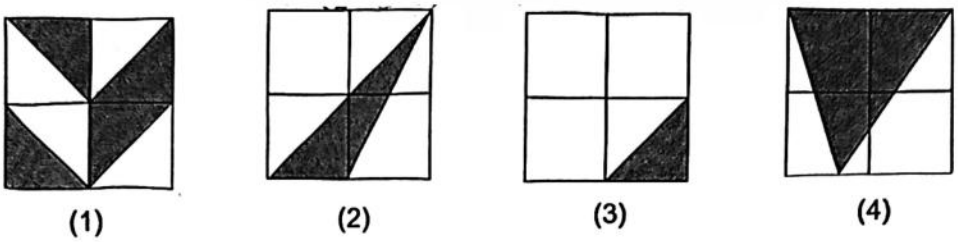
(2) $\angle a + \angle c$

(3) $\angle b + \angle c$

(4) $\angle b + \angle d$

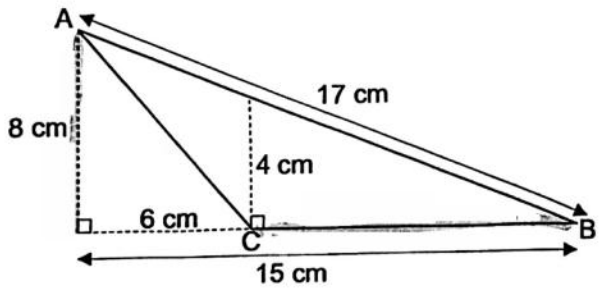
(Go on to the next page)

8 Which of the following shows $\frac{1}{4}$ of the figure shaded?



(1) (2) (3) (4)

9 Find the area of triangle ABC.



(1) 60 cm^2

(2) 36 cm^2

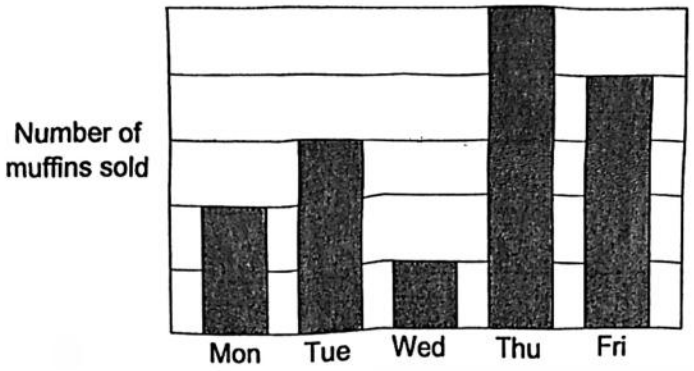
(3) 34 cm^2

(4) 30 cm^2

(Go on to the next page)

Use the information below to answer Questions 10 and 11.

The bar graph shows the number of muffins sold over 5 days. 60 muffins were sold on Thursday.



10 What was the total number of muffins sold from Monday to Wednesday?

(1) 12

(2) 36

(3) 72

(4) 108

11 The ratio of the number of muffins sold on Friday to the number of muffins sold on Saturday was 4 : 5. How many muffins were sold over the 6 days?

(1) 60

(2) 72

(3) 108

(4) 240

(Go on to the next page)

12 At a clearance sale, all items are sold at 40% discount. A customer gets 50% discount when he pays by cash. What is the percentage increase in the discount given when a customer pays by cash?

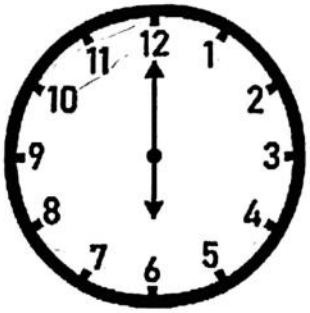
(1) 10%

(2) 20%

(3) 25%

(4) 50%

13 The clock shows 6 o'clock.



At what time will the two hands of the clock form an angle of 150°?

(1) 7 o'clock

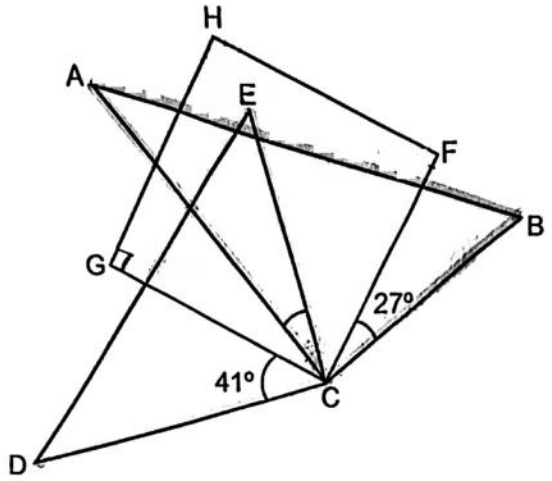
(2) 10 o'clock

(3) 3 o'clock

(4) 4 o'clock

(Go on to the next page)

14 ABC and CDE are right-angled triangles and GHFC is a square. $\angle DCG = 41°$ and $\angle BCF = 27°$. Find $\angle ACE$.



(1) 22°

(2) 18°

(3) 14°

(4) 4°

15 A pattern is formed using the letters A and H.
The first 20 letters are shown.

A	H	A	H	A	A	A	H	A	H	A	A	A	H	A	H	A	A	A	H ...
1st	2nd	3rd																20th	

How many times does the letter A appear in the first 80 letters of the pattern?

(1) 50

(2) 52

(3) 53

(4) 57

(Go on to BOOKLET B)

HENRY PARK PRIMARY SCHOOL
2025 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 1
(BOOKLET B)

Name: _____ ( )

Class: Primary 6_____

25

Total Time for Booklets A and B: 1 hour

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.

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

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 Express $5\frac{3}{20}$ as a decimal.

Ans: _____

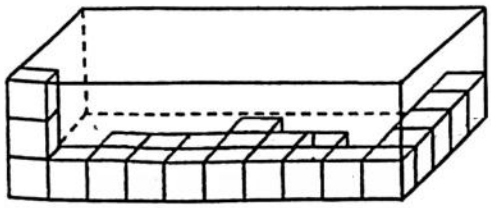
17 Find the value of 12.3 – 8.76

Ans: _____

18 Express 1.2% as a fraction.

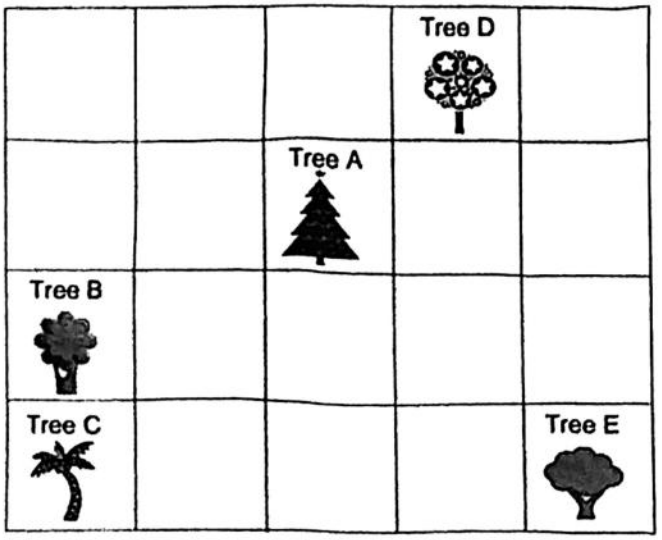
Ans: _____

19 A rectangular container is partly filled with 1-cm cubes as shown.
How many more 1-cm cubes are needed to fill the container completely?



Ans: _____

20 The square grid shows the plan of a garden where 5 types of trees A, B, C, D and E are planted.



Tree A is north-east of one of the trees. Which tree is it?

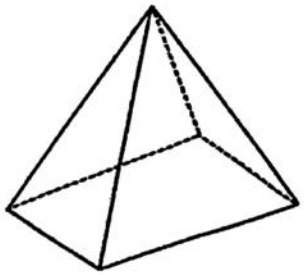
Ans: Tree _____

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 The diagram shows a solid.



(a) Name the solid.

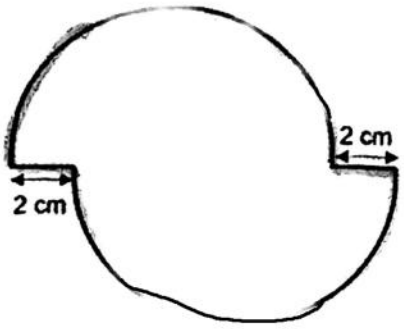
Ans: (a) _____

(b) How many faces does the solid have?

Ans: (b) _____

---

22 The figure is formed using 2 identical semicircles, each of radius 5 cm.
Find the perimeter of the figure.
Give your answer in terms of π.



Ans: _____ cm

---

23 Sue is m years old. Ted is 3 times as old as Sue. Uma is 2 years younger than Ted.

(a) What is the total age of the three people in terms of m?

Ans: (a) _____ years

(b) If $m = 5$, what is the total age of the three people?

Ans: (b) _____ years

---

24 A group of 10 adults and 11 children went to FunWorld Amusement Park. What was the least amount of money the group could have paid?

FunWorld Amusement Park

Child ticket price: $12.10
Adult ticket price: $22.50

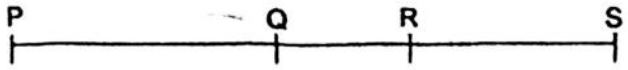


Promotion
For every 3 paying adults, 2 children enter free!

Ans: $ _____

---

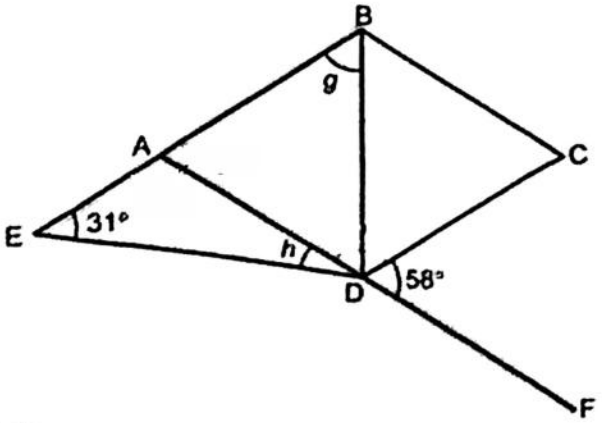
25 PQRS is a straight line. The lengths of PS and PR are in the ratio 3 : 2 and the lengths of PR and QS are in ratio 6 : 5. What is the ratio of length PQ to length RS?



Ans: _____

---

26 ABCD is a rhombus. BAE and ADF are straight lines.



(a) Find $\angle g$.

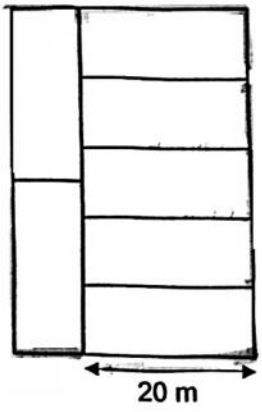
Ans: (a) _____ °

(b) Find $\angle h$.

Ans: (b) _____ °

---

27 A plot of land is divided into seven identical rectangular fields. The length of each field is 20 m. Find the perimeter of the plot of land.



Ans: _____ m

---

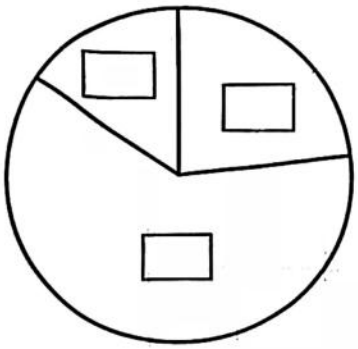
28 A machine started labelling containers at 9 a.m. at the rate of 600 containers per hour. For every 3 hours, the machine stops for 15 minutes. How many containers can it label by 1.45 p.m. on the same day?

Ans: _____

---

29. Students were asked to choose one of the following items; a pouch, a keychain or a badge. $\frac{1}{5}$ of them chose keychain. The number of students who chose pouch was $\frac{1}{2}$ of those who chose badge.

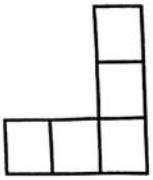
(a) The pie chart represents the number of students who chose each item. Label the pie chart by writing **P** for pouch, **K** for keychain and **B** for badge in the boxes.



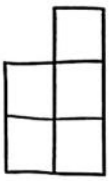
(b) What fraction of the students chose badge?

Ans: (b) _____

30 7 similar cubes were stacked to make a solid figure such that it has the following front and side views.



Front View



Side View

Draw the top view of the figure on the grid.



End of Paper 1

HENRY PARK PRIMARY SCHOOL
2025 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 2

Parent's Signature

_____

Name: _____( )

Class: Primary 6_____

/ 55

Time for Paper 2: 1 hour 30 minutes

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

Follow all instructions carefully.

Answer all questions.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are allowed to use a calculator.

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 **(a)** How many factors are there in 36?

Ans: (a) _____

(b) Write down the first common multiple of 4 and 10.

Ans: (b) _____

---

2 The table shows the time taken by 4 swimmers to complete a race. The time taken by Bala to complete the race is not shown.

Swimmer	Time in seconds (s)
Afiq	50.78
Bala	?
Cayden	48.12
Dai Ming	46.9

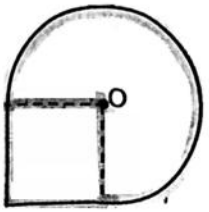
The average time taken by the 4 swimmers was 48.7 s. What was the time taken by Bala to complete the race?

Ans: _____ s

Please do not write in the margin.

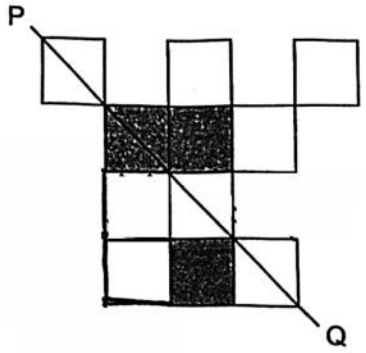
Please do not write in the margin.

3 The figure is made up of a square and a $\frac{3}{4}$ - circle. The $\frac{3}{4}$ - circle with centre O has a diameter of 8 cm. What is the area of the figure? (Take $\pi = 3.14$)



Ans: _____ cm^2

4 Jack wanted to create a figure using white squares and grey squares, with PQ as the line of symmetry. He still had more squares to add.



(a) Measure and write down the length of PQ.

Ans: (a) _____ cm

(b) What are the smallest numbers of white squares and grey squares Jack needs to add to the figure so that PQ remains as the line symmetry?

Ans: (b) white squares: _____

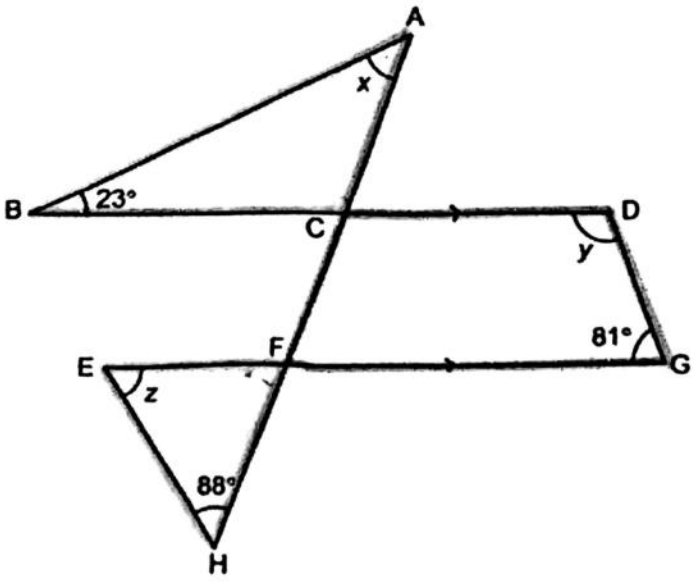
grey squares: _____

Please do not write in the margin.

Please do not write in the margin.

Please do not write in the margin.

5 ABC and FEH are triangles and CFGD is a trapezium. BCD, EFG and ACFH are straight lines.



Find the sum of $\angle x$, $\angle y$ and $\angle z$.

Ans: _____ °

Please do not write in the margin.

Please do not write in the margin.

Please do not write in the margin.

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 the brackets [ ] at the end of each question or part-question.

(45 marks)

6 The table shows the number of boys and girls, and teachers in Schools A and B. Some of the information is missing.

	Boys	Girls	Teachers	Total
School A	845			
School B			154	
Total		2460	251	4642

(a) What is the total number of boys in both schools?

Ans: (a) _____ [1]

(b) The number of girls in School A is $\frac{2}{3}$ of the number of girls in School B. Find the total number of students in School A.

Ans: (b) _____ [2]

Please do not write in the margin.

Please do not write in the margin.

7 For every mobile phone that Susan sells, she earns a sum of money as shown.

10% of the first $160 of the selling price and 12% of the remaining selling price

Susan sold a mobile phone and earned $76.90. What was the selling price of the mobile phone?

Ans: _____ [3]

Please do not write in the margin.

Please do not write in the margin.

Please do not write in the margin.

8 At 9 a.m., a truck left Town S for Town M at an average speed of 48 km/h. 30 minutes later, a car left Town M for Town S. The average speed of the car was twice the average speed of the truck. The truck and the car passed each other at 11.30 a.m. What is the distance between Town S and Town M?

Ans: _____ [3]

9 At a shop, erasers were sold in packets of 3 and pens were sold in packets of 5. Bella paid with a $50-note for 9 erasers and 20 pens. How much change did Bella receive? Give your answer in terms of q.

	Cost per packet
Erasers	$\$q$
Pens	$\$2q$

Ans: _____ [3]

Please do not write in the margin.
Please do not write in the margin.
Please do not write in the margin.

10. Julie's coin box contained 20-cent and 50-cent coins. In the coin box, there were 7 more 50-cent coins than 20-cent coins. The total amount of money in the coin box was $18.90.

(a) How many coins were in the coin box?

Ans: (a) _____ [3]

(b) How much money does Julie have left in the coin box after spending all her 20-cent coins on food?

Ans: (b) _____ [1]

11 Adam cut a rope into 3 pieces. The first piece was 4.5 m longer than $\frac{1}{4}$ the original length of the rope. The second piece was 3.3 m longer than $\frac{3}{5}$ of the remaining rope after the first cut. The third piece was 8.7 m. What was the original length of the rope?

Ans: _____ [4]

12 Mrs Brown bought $\frac{2}{5}$ as many cupcakes as pies for a party. She spent $\frac{3}{4}$ as much on each cupcake as each pie. Each cupcake cost $4.50. She paid $504 more on the pies than the cupcakes.

(a) How much did she pay for each pie?

Ans: (a) _____ [1]

(b) How many pies did she buy?

Ans: (b) _____ [4]

13 There were some apples and oranges in a box. In the morning, when 24 apples were added to the box, the ratio of the number of apples to the number of oranges in the box was 6 : 5. Then 35 oranges were removed from the box and the ratio became 4 : 1

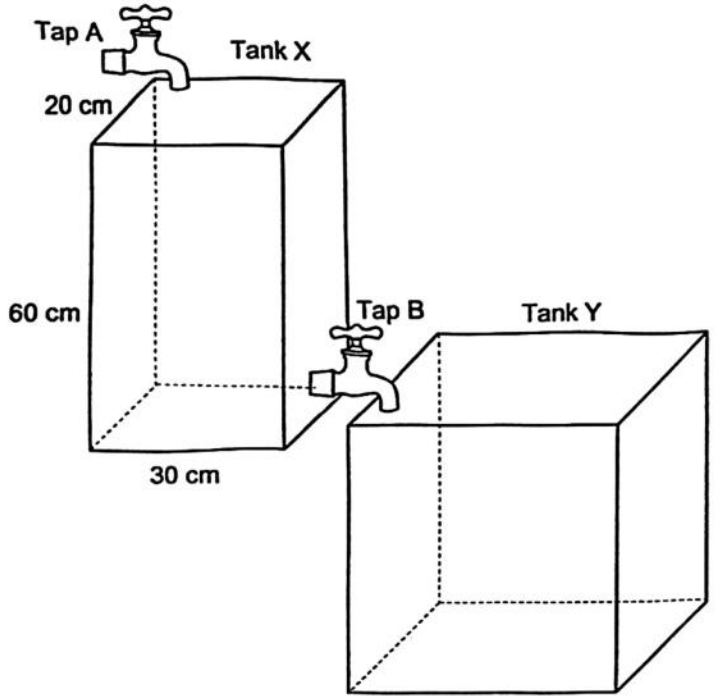
(a) How many apples were there in the box at first?

Ans: (a) _____ [3]

(b) In the afternoon, more apples and oranges were added into the box. The number of apples increased by 65% and the number of oranges increased by 120%. Find the total number of apples and oranges added to the box in the afternoon.

Ans: (b) _____ [2]

14 The figure shows taps A and B, a rectangular tank X and a cubical tank Y. Both tanks were empty.



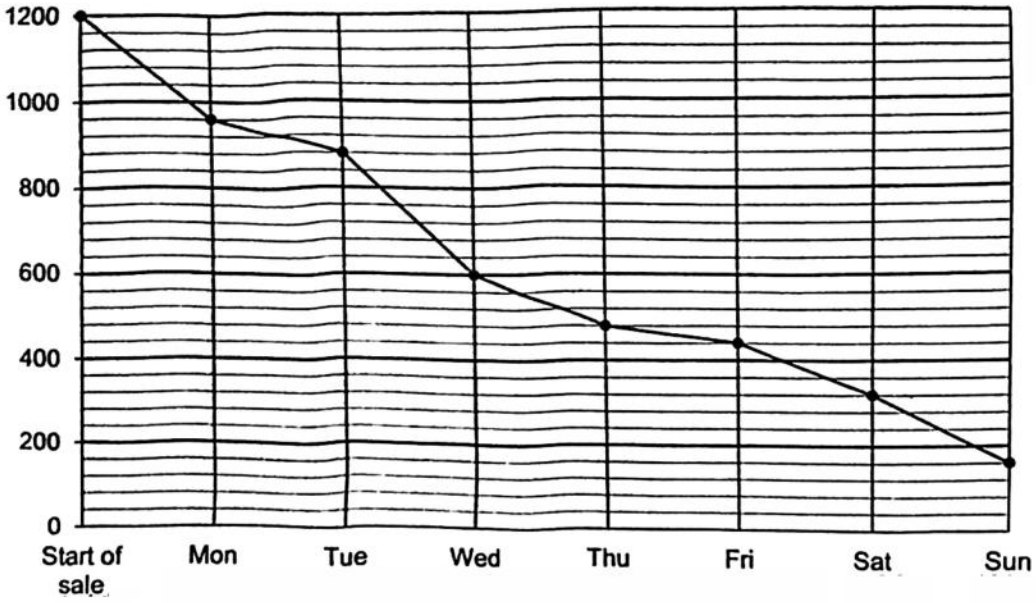
At 08 20, tap A was turned on. Water flowed into the tank from tap A at a rate of 4.8 litres per minute. After 5 minutes, tap B was turned on.

At 08 35, both taps were turned off. Tank X was half-filled with water and Tank Y was 25% filled with water.

Find the length of tank Y.

Ans: _____ [3]

15. A florist sold roses from Monday to Sunday. The line graph shows the number of roses left unsold at the end of each day.



(a) On which day had the florist sold half the total number of roses for the week?

Ans: (a) _____ [1]

(b) On which two days did the florist sell the same number of roses?

Ans: (b) _____ and _____ [1]

(c) The usual price of a stalk of rose was $9. On Saturday, after selling 52 stalks of roses, the remaining roses were sold at a discount of 25%. What was the total amount collected on Saturday?

Ans: (c) _____ [2]

Please do not write in the margin.

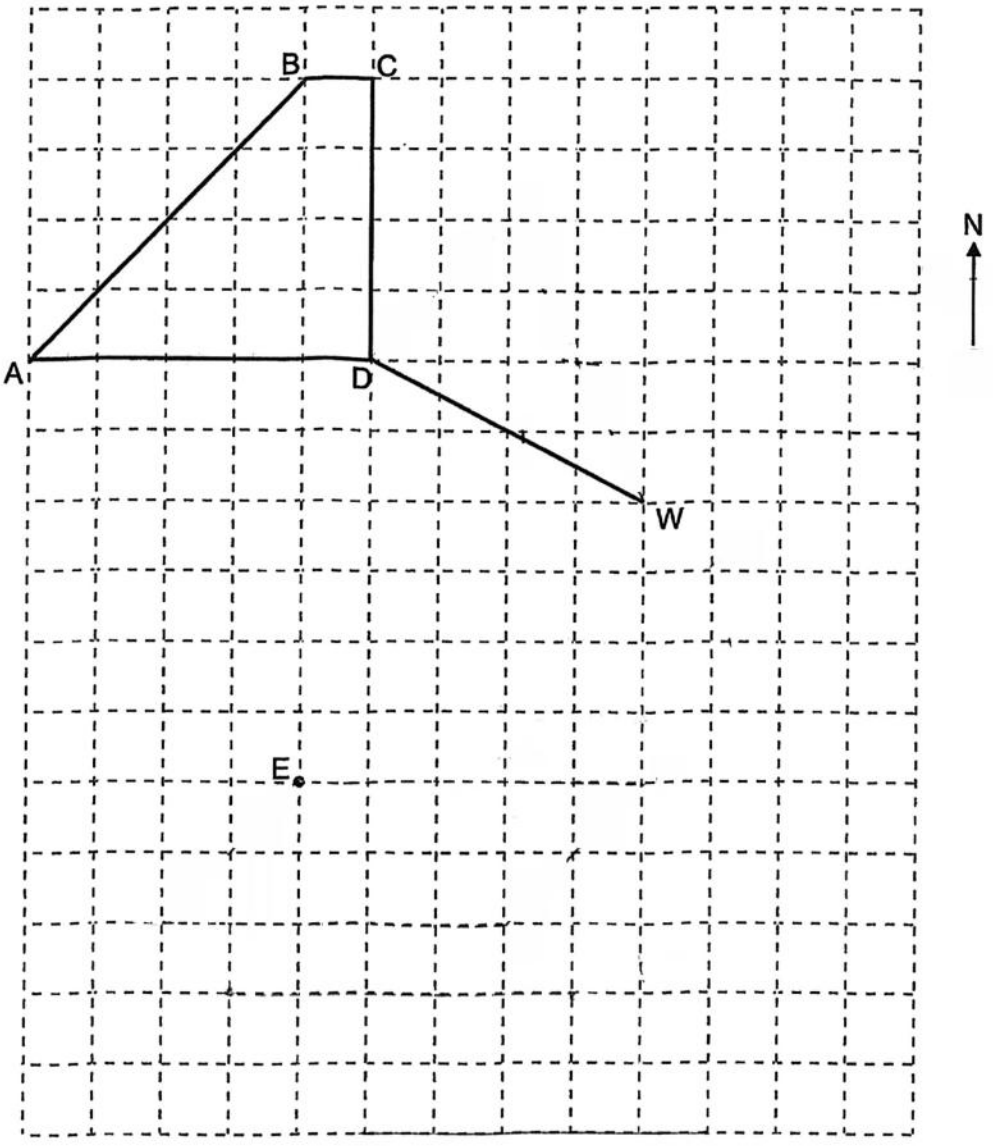
Please do not write in the margin.

16 A trapezium ABCD is drawn in a square grid.

(a) Using the line DW, draw an isosceles triangle DWX such that ∠DWX is less than 90° and DW = WX. [1]

(b) Using point E, draw a parallelogram EFGH such that it has the same perimeter as ABCD. Point H is south-east of E while point F is east of E. [2]

Use a pencil to draw your diagram and label it clearly.

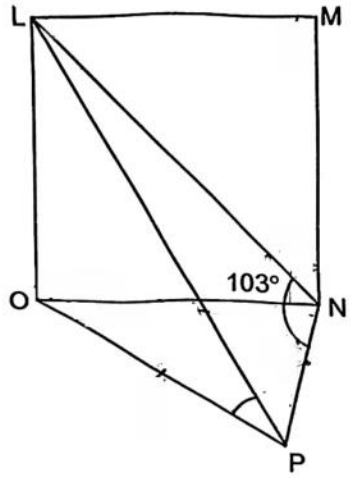


Please do not write in the margin.

Please do not write in the margin.

Please do not write in the margin.

16 (c) LMNO is a square and ONP is an isosceles triangle where ON = OP. Given that ∠LNP = 103°, find ∠OPL.



Ans:(c) _____ [2]

Please do not write in the margin.

Please do not write in the margin.

Please do not write in the margin.

17. The first four figures of a pattern are shown below.

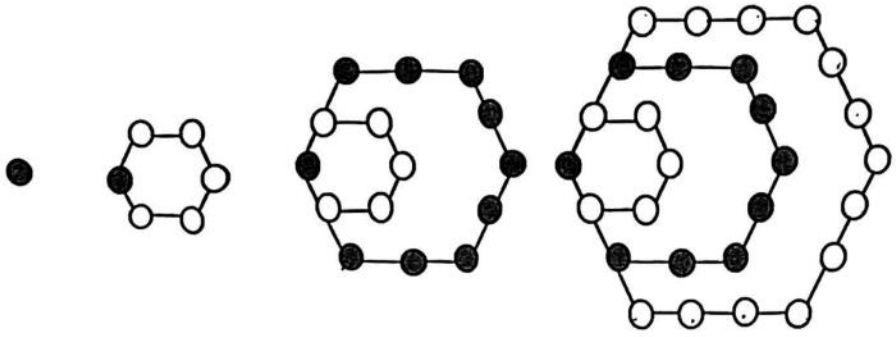


Figure 1 Figure 2 Figure 3 Figure 4

The table shows the number of white and grey circles used for the first four figures.

Figure Number	1	2	3	4	5
Number of white circles	0	5	5	18	18
Number of grey circles	1	1	10	10	

[1]

(a) Fill in the table for Figure 5.

(b) How many white and grey circles are there altogether in Figure 28?

Ans: (b) _____ [2]