HENRY PARK PRIMARY SCHOOL
2026 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 1
(BOOKLET A)

Name: _____ ( ) Parent's Signature

Class: Primary 6_____ _____

Date: 18 August 2026

Paper 1	Booklet A	26
	Booklet B	24
Paper 2		50
Total		100

Total Time for Booklets A and B: 1 hour 10 minutes
Additional Materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO STUDENTS

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

Questions **1** to **10** carry 1 mark each. Questions **11** to **18** 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.

(26 marks)

---

1 What is the value of the digit 6 in 3 560 412?

(1) 60

(2) 600

(3) 6000

(4) 60 000

2 What are the missing numbers in the blanks?

The number 8 is a factor of _____ and _____.

(1) 2, 4

(2) 8, 18

(3) 32, 40

(4) 16, 36

3 $50 + \frac{5}{10} + \frac{5}{1000} =$ _____

(1) 50.05

(2) 50.55

(3) 50.055

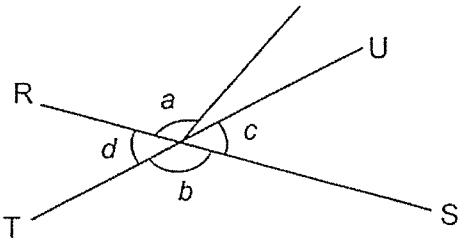
(4) 50.505

(Go on to the next page)

4 Arrange the following fractions from the smallest to the greatest: $\frac{11}{8}$, $1\frac{3}{4}$, $\frac{7}{5}$

	Smallest		Greatest
(1)	$\frac{7}{5}$,	$\frac{11}{8}$,	$1\frac{3}{4}$
(2)	$\frac{11}{8}$,	$1\frac{3}{4}$,	$\frac{7}{5}$
(3)	$\frac{11}{8}$,	$\frac{7}{5}$,	$1\frac{3}{4}$
(4)	$1\frac{3}{4}$,	$\frac{11}{8}$,	$\frac{7}{5}$

5 In the figure below, RS and UT are straight lines.
Which of the following statements is true?



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

(2) $\angle c = \angle d$

(3) $\angle a + \angle c = 180°$

(4) $\angle a + \angle b = 180°$

6 A printing machine can print 45 pages in 3 minutes. At this rate, how many pages can the printing machine print in 5 minutes?

(1) 9

(2) 15

(3) 75

(4) 225

7 Jiayu and his brother took part in a run. They started running at the same time. Jiayu took 2 h 20 min to complete the run while his brother was faster than him by 30 minutes. Jiayu's brother completed the run at 11:35 am. What time did they start running?

(1) 8:45 am

(2) 9:10 am

(3) 9:15 am

(4) 9:45 am

8 Figure 1 shows the net of a cube. Which cube is formed by the given net?

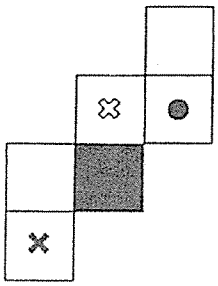
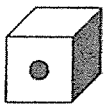
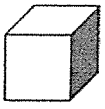


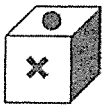
Figure 1



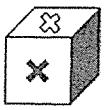
Cube A



Cube B



Cube C



Cube D

(1) Cube A

(2) Cube B

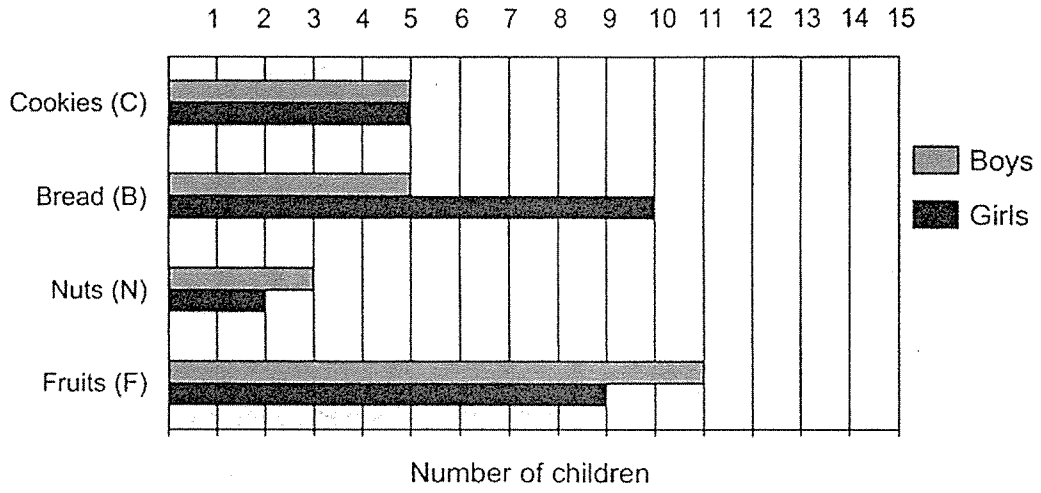
(3) Cube C

(4) Cube D

(Go on to the next page)

*Use the information below to answer Questions **9** and **10**.*

The bar graph shows the favourite snacks of some children. The number is not shown on the scale.



9 What percentage of the children who chose nuts as their favourite snack are boys?

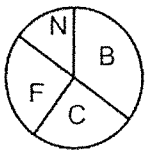
(1) 6 %

(2) 10 %

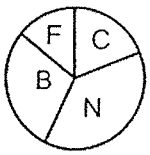
(3) 30 %

(4) 60 %

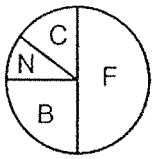
10 Which pie chart best represents the information in the bar graph?



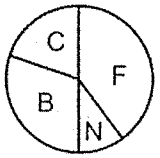
(1)



(2)

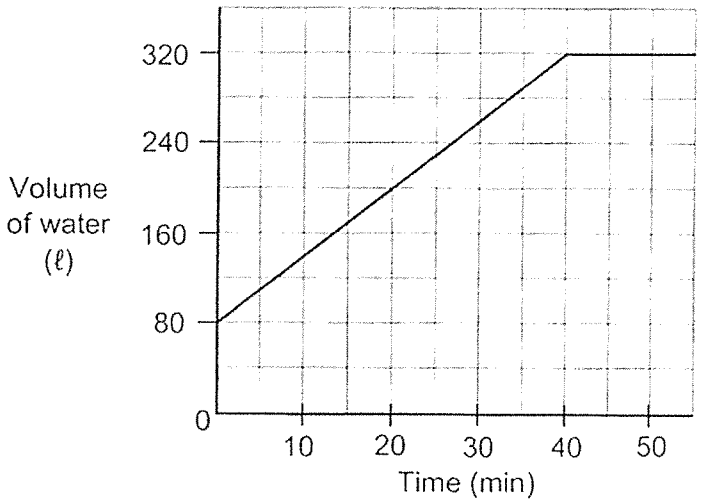


(3)



(4)

11 A tank was partially filled with water. A tap was turned on for 40 minutes to fill the tank completely. The line graph shows the volume of water in the tank over a period of time.



How many litres of water flowed out of the tap in 1 minute?

(1) 4.8 ℓ

(2) 6 ℓ

(3) 6.4 ℓ

(4) 8 ℓ

12 A string was first cut into two pieces in the ratio 1 : 3. The longer piece was then cut into two pieces in the ratio 2 : 3. The difference between the longest and the shortest piece of string was 96 cm. What is the original length of the string before it was cut?

(1) 192 cm

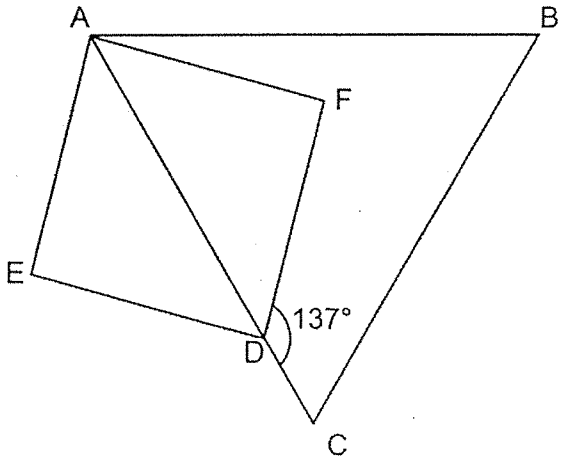
(2) 360 cm

(3) 480 cm

(4) 640 cm

(Go on to the next page)

13 ABC is an equilateral triangle. AFDE is a rhombus. ∠CDF is 137°.
Find ∠BAF.



(1) 15°

(2) 17°

(3) 30°

(4) 43°

14 There were 4 times as many boys as girls in the hall. After $\frac{1}{3}$ of the boys left the hall and 40 more girls entered the hall, the number of boys and girls became the same. How many pupils were there in the hall at first?

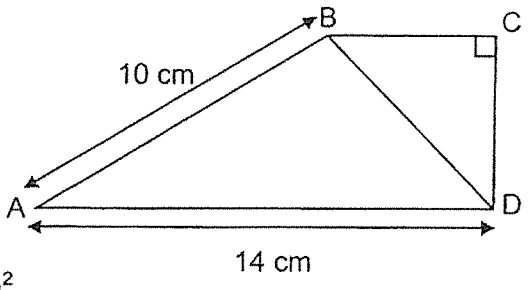
(1) 60

(2) 75

(3) 120

(4) 128

15 The figure below is made up of 2 triangles. The perimeter of the figure is 40 cm and BC = CD. Find the area of the figure.



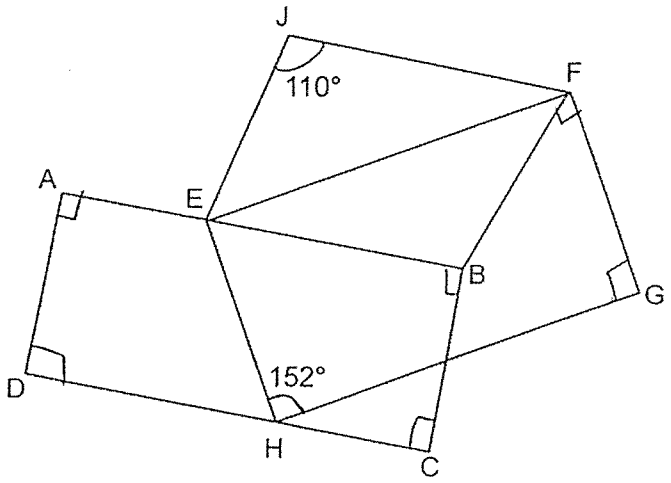
(1) 80 cm^2

(2) 88 cm^2

(3) 102 cm^2

(4) 160 cm^2

16 ABCD and EFGH are rectangles. BEJF is a trapezium. BE // FJ. ∠DHG is 152° and ∠EJF is 110°. Find ∠JEF.



(1) 42°

(2) 38°

(3) 35°

(4) 34°

(Go on to the next page)

17 Danny, Eric and Faizal shared some marbles. Danny took 84 marbles first. Eric then took $\frac{1}{7}$ of the remaining marbles and Faizal took the rest of the marbles. The number of marbles Faizal took was $\frac{3}{4}$ of the total number of marbles. How many marbles were there in total?

(1) 672

(2) 784

(3) 336

(4) 112

18 The figure shows part of a pattern formed by hearts and triangles. There are 55 hearts altogether. What is the greatest possible number of hearts and triangles in the pattern?

(1) 91

(2) 94

(3) 96

(4) 97

Go on to Booklet B

HENRY PARK PRIMARY SCHOOL
2026 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 1
(BOOKLET B)

Name: _____ ( )

Class: Primary 6 _____

24

Date: 18 August 2026

Total Time for Booklets A and B: 1 hour 10 minutes

INSTRUCTIONS TO STUDENTS

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. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
6. The use of calculators is **NOT** allowed.
7. Do not use correction fluid/tape.
8. Do not use highlighters on any part of your answers.

Questions **19** 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.

(24 marks)

19 (a) Find the value of 14 – 0.52

Ans: (a) _____

(b) Express 3.05 as a mixed number in its simplest form.

Ans: (b) _____

20 (a) Find the value of 30 – 20 ÷ 5 + 2 × 7

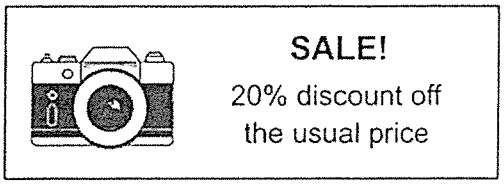
Ans: (a) _____

(b) Find the value of 7 ÷ 8. Give your answer as a decimal.

Ans: (b) _____

(Go on to the next page)

21 During a sale, cameras were sold at a 20% discount.

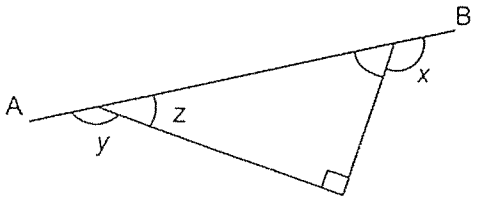


Ani bought a camera for $480 during the sale. What is the usual price of the camera?

Ans: $ _____

---

22 AB is a straight line. What is the sum of $\angle x$ and $\angle y$?



Ans: _____ °

---

23 Sam has \$2y. Paul has twice as much as money as Sam. Jack has \$15 more than Paul.

(a) Find the total amount of money that the three boys have in terms of y.

Ans: \$ _____

(b) The three boys have \$185 altogether. Find the value of y.

Ans: _____

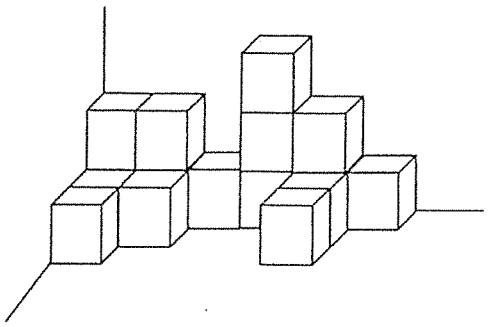
---

24 The average of three 3-digit numbers is 350. One of the numbers is 280. What is the largest possible difference between the other two numbers?

Ans: _____

(Go on to the next page)

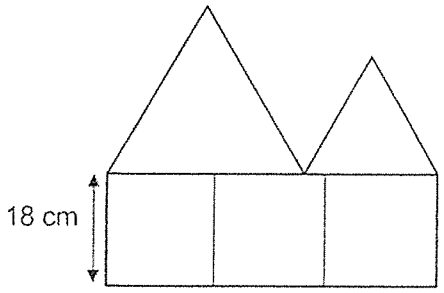
25 What is the least number of cubes that must be added to make this solid to form a cuboid?



Ans: _____

---

26 The figure below is formed using 3 identical squares and 2 different equilateral triangles. The length of the square is 18 cm. Find the perimeter of the figure.



Ans: _____ cm

---

27 An archer shot 40 arrows.

She earned 1 point for every arrow that hit the target.
She lost 1 point for every arrow that missed the target.

For her first 30 arrows, 22 hit the target.

(a) What was her score after her first 30 arrows?

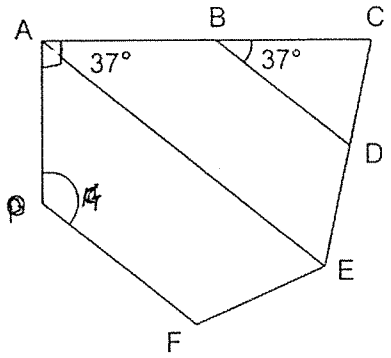
Ans: _____

(b) After shooting all 40 arrows, her final score was 20 points.
How many of the last 10 arrows hit the target?

Ans: _____

Please do not write in the margin.

28 AC is a straight line and is perpendicular AG. BD, AE and GF are parallel lines.
Find $\angle p$.



Ans: _____ °

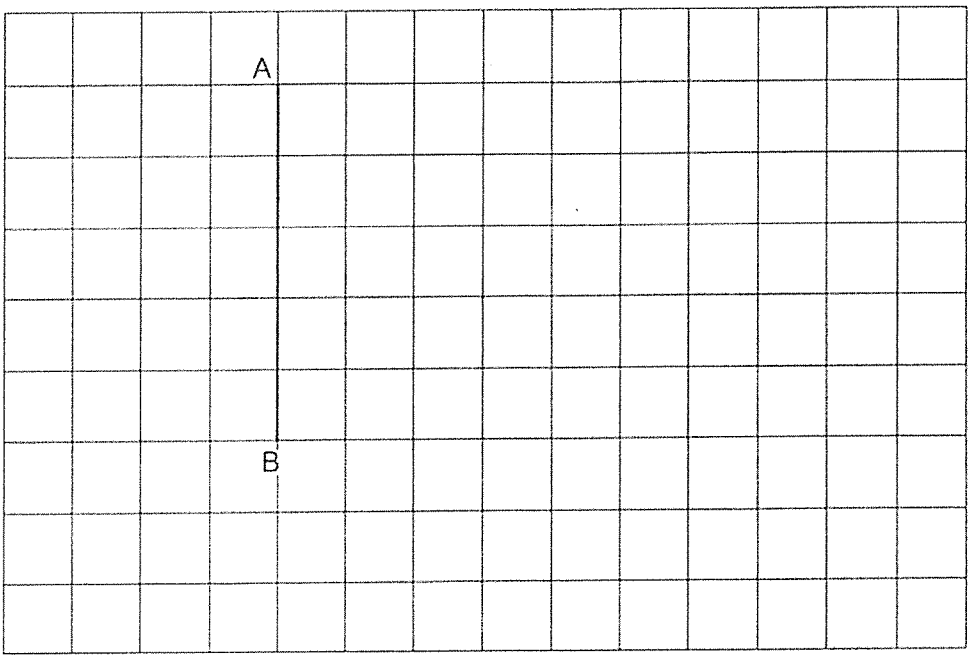
 (Go on to the next page)

29 The square grid shows line AB.

(a) AB is a side of a right-angled triangle ABC with an area of 5 square units.
Draw triangle ABC.

(b) AB is also a side of a parallelogram ABDE. The perimeter of ABDE is twice that of triangle ABC.
Draw parallelogram ABDE such that it does not overlap with triangle ABC.

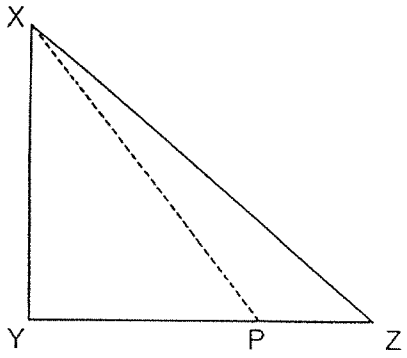
Use a pencil to draw your diagrams and label them clearly.



Please do not write in the margin.

30 A triangular piece of paper XYZ is folded along the dotted line XP as shown in Figure 1. Figure 2 shows the paper after folding. The area of the figure after folding is $\frac{5}{8}$ the area of triangle XYZ. The area of triangle XWP is 84 cm^2.
Find the area of triangle XYZ.

Figure 1
(Before folding)



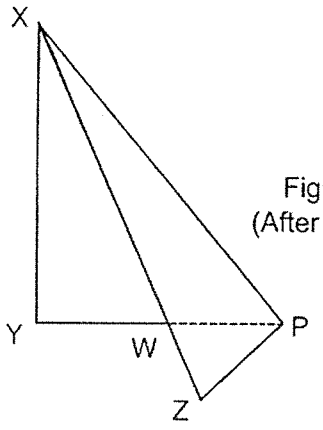


Figure 2
(After folding)

Ans: _____ cm^2

End of Paper

Please do not write in the margin.

Please do not write in the margin.

HENRY PARK PRIMARY SCHOOL
2026 PRELIMINARY EXAMINATION
MATHEMATICS
PRIMARY 6

PAPER 2

Parent's Signature

_____

Name: _____

Class: Primary 6 _____

/ 50

Date: 18 August 2026

Time: 1 hour 20 minutes

INSTRUCTIONS TO STUDENTS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
5. The use of an approved calculator is allowed.
6. Do not use correction fluid/tape.
7. Do not use highlighters on any part of your answers.

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 The table shows the number of stickers that each pupil has collected.

Number of stickers collected	6	10	14
Number of pupils	5	?	7

$\frac{1}{4}$ of the pupils collected 10 stickers each. How many stickers were collected in total?

Ans: _____

---

2 The average savings of 7 students is \$120. Another student joined the group and the average savings decreased by \$5. What was the amount of savings for the student who joined the group?

Ans: \$ _____

Please do not write in the margin.

(Go on to the next page)

3 Sarah bought $(2r + 8)$ kg of nuts. She kept 4 kg for herself and shared the rest equally among her 3 friends.

(a) How many kilograms of nuts did each of her friends get? Express your answer in terms of r.

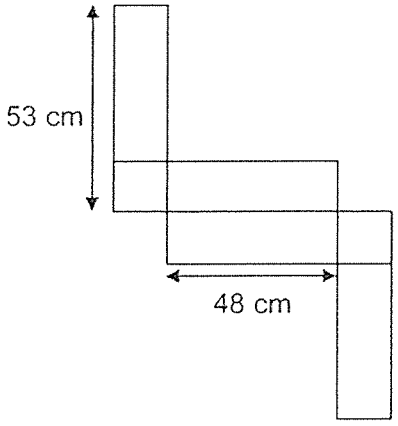
Ans: (a) _____ kg [1]

(b) One of Sarah's friends, Macy, repacked the amount of nuts she got equally into 2 bags. Find the mass of each bag when $r = 7$.

Ans: (b) _____ kg [1]

---

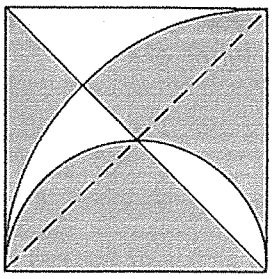
4 The figure shows the net of a cuboid which is made up of 4 rectangles and 2 squares. Find the volume of the cuboid.



Ans: _____ cm^3

---

5 The figure shows a square, a quarter circle and a semicircle. The area of the square is 360 cm^2. Find the area of the shaded part.



Ans: _____ cm^2

Please do not write in the margin.

(Go on to the next page)

Please do not write in the margin.

For questions **6** to **15**, show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

---

6 During a sale, Shop A sold $\frac{2}{5}$ of its cookies, Shop B sold $\frac{1}{2}$ of its cookies and Shop C sold $\frac{1}{4}$ of its cookies. Each shop sold the same number of cookies.

(a) What fraction of all the cookies were sold?

Ans: (a) _____ [2]

(b) There was a total of 935 cookies in the three shops at first.
Find the total number of cookies left.

Ans: (b) _____ [1]

---

7 Mr Ong packed stationery into Box A and Box B. The ratio of the number of pencils to erasers in Box A is 1 : 5. The ratio of the number of pencils to erasers in Box B is 5 : 3. There are 3 times as many items in Box A as in Box B.

(a) What is the ratio of the total number of pencils to the total number of erasers?

Ans: (a) _____ [2]

(b) There are 30 erasers in Box B. Find the total number of pencils and erasers in Box A.

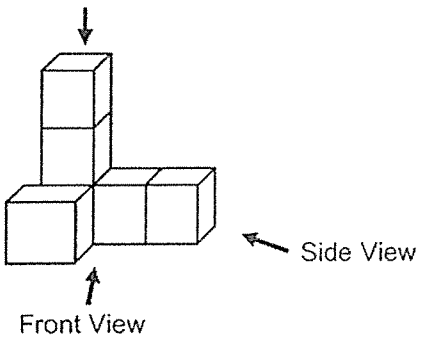
Ans: (b) _____ [1]

Please do not write in the margin.

(Go on to the next page)

8 Tim built a solid using 7 cubes.

(a) Draw the front view of the solid. [1]



Front view

(b) Tim added 2 more cubes to the solid such that the top view is as shown. Draw the side view of this solid. [1]

Top view

Side view

(c) The original solid with 7 cubes was glued together and painted blue. The total surface area of the unpainted faces is 432 cm^2. What is the volume of the original solid?

Ans: (c) _____ cm^3 [2]

9 Melissa had some beads. $\frac{5}{8}$ of the beads were wooden beads and the rest were glass beads. The mass of each wooden bead was 10 g and the mass of each glass bead was 15 g.

(a) The total mass of all the beads was 1.33 kg. How many beads did Melissa have in total?

Ans: (a) _____ [3]

(b) Melissa then bought more wooden beads. The number of wooden beads increased by 20%. What is the total mass of all the beads in the end? Give your answer in kilograms.

Ans: (b) _____ kg [1]

(Go on to the next page)

10 There were 80 more boys than girls who participated in a sports camp last year. This year, the number of girls decreased by 50% while the number of boys increased by 40%. As a result, the camp has 188 participants this year.

(a) How many boys participated in the camp this year?

Ans: (a) _____ [3]

(b) At the camp this year, each girl received 2 more activity cards than each boy. A total of 604 activity cards were given out. How many activity cards did each boy receive?

Ans: (b) _____ [2]

Please do not write in the margin.

Please do not write in the margin.

11 Different numbers of tickets are available for sale for an exhibition every month. Figure 1 shows the number of tickets sold from January to May. Figure 2 shows the number of tickets left unsold at the end of each month.

Figure 1

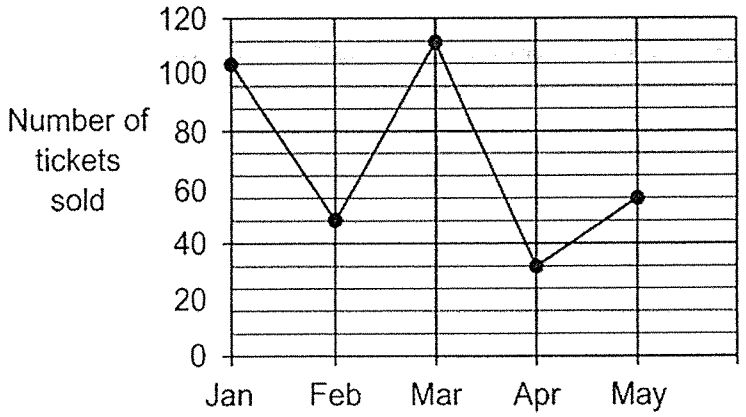
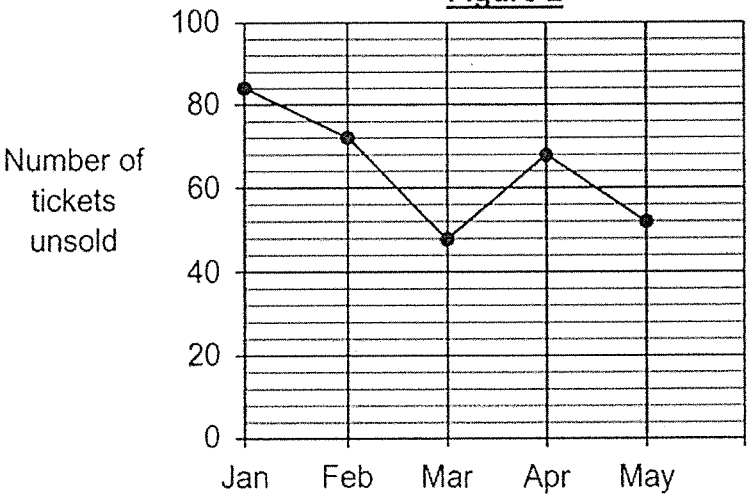


Figure 2



(a) What percentage of the tickets available for sale in February were sold?

Ans: (a) _____ % [2]

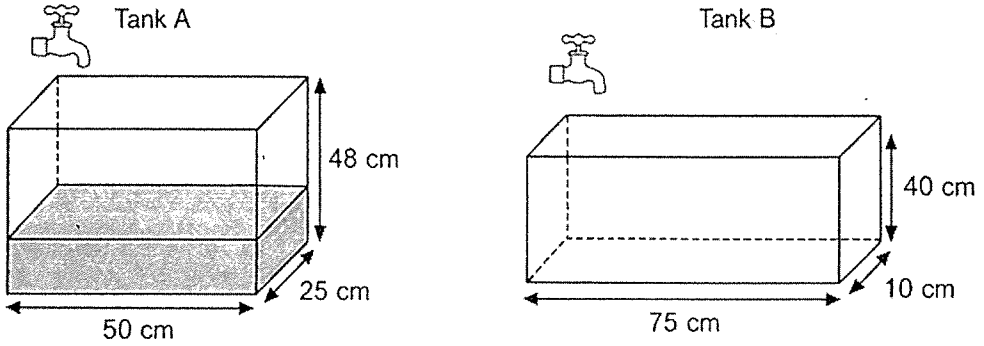
(b) The average number of unsold tickets in June and July is 20 more than the average number of unsold tickets from March to May.
Write down one possible set of values for the number of unsold tickets in June and July.

Ans: (b) _____ , _____ [2]

12 At a supermarket, 12 points are earned for every $2.50 spent. For every $50 spent, there is an additional 80 bonus points given. Mrs Tan wants to earn 996 points to exchange for a gift. What is the least amount of money Mrs Tan needs to spend?

Ans: $ _____ [3]

13 Two rectangular tanks A and B are shown.



Please do not write in the margin.

At first $\frac{1}{4}$ of tank A is filled with water and tank B was empty. Both taps were turned on at the same time and water flowed out from both taps at the same time at a rate of 1.5 ℓ /min.

(a) What is the increase in the water level of each tank in one minute?

Ans: (a) Tank A: _____ cm

Tank B: _____ cm [1]

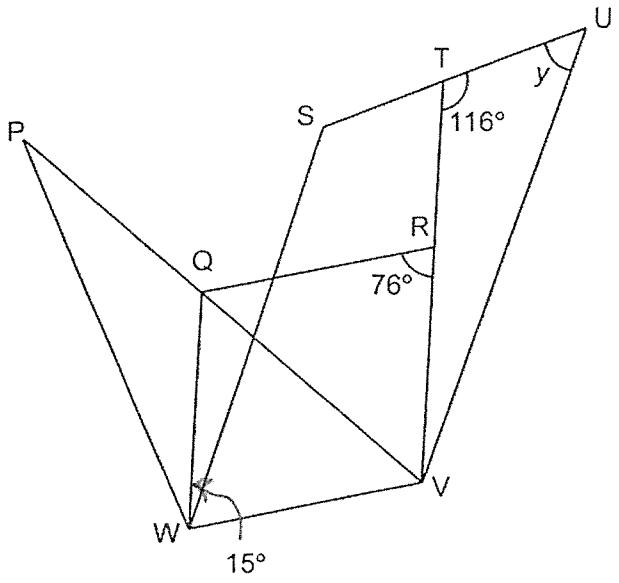
(b) How long did it take for the height of the water to be the same in both tanks?

Ans: (b) _____ min [3]

(Go on to the next page)

Please do not write in the margin.

14 QRVW is a rhombus. WS is parallel to VU and PQ = QW. PQV and TRV are straight lines. ∠QWS = 15°, ∠QRV = 76° and ∠UTV = 116°.



(a) Find ∠x.

Ans: (a) _____ ° [2]

(b) Find ∠y.

Ans: (b) _____ ° [2]

(c) Circle the words that describe SUVW in the statement:

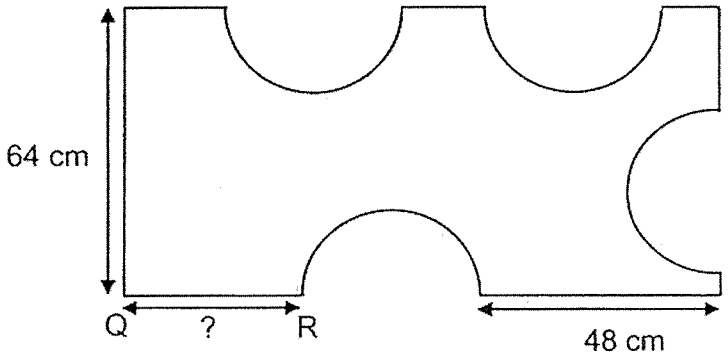
Since WS is parallel to VU and SU (**is / is not**) parallel to WV, SUVW is a (**parallelogram / trapezium**).

[1]

Please do not write in the margin.

Please do not write in the margin.

15 Mdm Santhi had a rectangular piece of cloth. She cut out 4 identical semicircles of diameter 35 cm from the cloth. The perimeter of the remaining piece of cloth is 428 cm. (Take $\pi = \frac{22}{7}$)



(a) What is the total area of all the semicircles that Mdm Santhi has cut out?

Ans: (a) _____ cm^2 [2]

(b) What is the length of QR?

Ans: (b) _____ cm [3]

End of Paper

Please do not write in the margin.

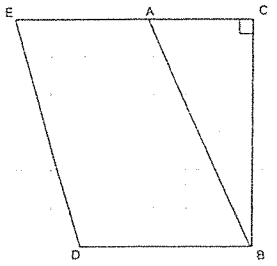
Please do not write in the margin.

YEAR : 2026
LEVEL : PRIMARY 6
SCHOOL : HENRY PARK PRIMARY SCHOOL
SUBJECT : MATHEMATICS
TERM : PRELIMINARY EXAMINATION

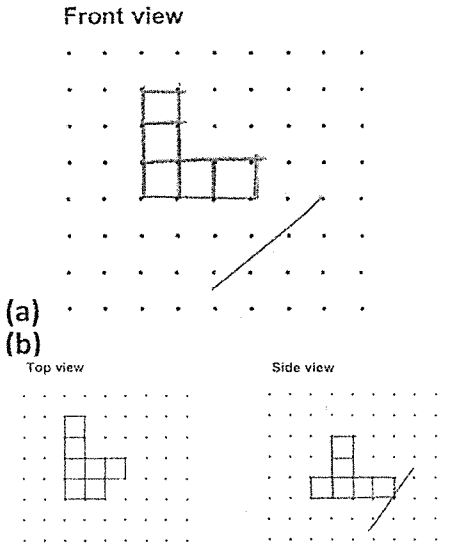
(BOOKLET A)

Q1	4	Q2	3	Q3	4	Q4	3	Q5	2
Q6	3	Q7	4	Q8	3	Q9	4	Q10	4
Q11	2	Q12	3	Q13	2	Q14	3	Q15	2
Q16	1	Q17	1	Q18	3				

(BOOKLET B)

Q19	a) 14.00 - 0.52 = 13.48 (b) $3.05 = 3 + \frac{5}{100} = 3\frac{1}{20}$ Answers: (a) 13.48; (b) $3\frac{1}{20}$	Q20	(a) 30 - 20 ÷ 5 + 2 × 7 = 40 (b) 7 ÷ 8 = 0.875 Answers: (a) 40; (b) 0.875
Q21	Sale price = 100% - 20% = 80% \$480 ÷ 80 × 100 = \$600 Answer: \$600	Q22	The other two interior angles total 90°. x + y = 360° - 90° = 270° Answer: 270°
Q23	Paul = \$4y; Jack = \$(4y + 15) (a) 2y + 4y + 4y + 15 = 10y + 15 (b) 10y + 15 = 185; y = 17 Answers: (a) \$(10y + 15); (b) 17	Q24	Other two numbers total = 350 × 3 - 280 = 770 Largest difference = 670 - 100 = 570 Answer: 570
Q25	Cuboid = 3 × 3 × 6 = 54 cubes Existing solid = 16 cubes 54 - 16 = 38 cubes Answer: 38 cubes	Q26	Large triangle side = 18 × 2 = 36 cm Perimeter = 54 + 36 + 72 + 36 = 198 cm Answer: 198 cm
Q27	(a) Misses = 30 - 22 = 8; score = 22 - 8 = 14 (b) Last 10 score = 20 - 14 = 6 h - (10 - h) = 6; h = 8 Answers: (a) 14; (b) 8	Q28	Angle between AC and AE = 90° - 37° = 53° Interior angle = 180° - 53° = 127° p = 360° - 127° = 233° Answer: 233°
Q29		Q30	Overlap = $1 - \frac{5}{8} = \frac{3}{8}$ of triangle XYZ $\frac{3}{8}$ of total area = 84 cm² Total area = 84 × 8 ÷ 3 = 224 cm² Answer: 224 cm²

PAPER 2

Q1	Let x pupils collect 10 stickers. $x = \frac{1}{4}(5 + x + 7)$, so $x = 4$ Total = $6 \times 5 + 10 \times 4 + 14 \times 7 = 168$ Answer: 168 stickers	Q2	Original total = $7 \times \$120 = \$840$ New total = $8 \times \$115 = \$920$ $\$920 - \$840 = \$80$ Answer: \$80
Q3	(a) Shared amount = $2r + 8 - 4 = 2r + 4$ Each friend gets $\frac{2r+4}{3}$ kg (b) r = 7: $(18 \div 3) \div 2 = 3$ kg Answers: (a) $\frac{2r+4}{3}$ kg; (b) 3 kg	Q4	Square side = 53 - 48 = 5 cm Volume = $48 \times 5 \times 5 = 1200$ cm^3 Answer: 1200 cm^3
Q5	The semicircle and quarter circle have equal areas. Unshaded area = $\frac{1}{4} \times 360 = 90$ cm^2 Shaded area = 360 - 90 = 270 cm^2 Answer: 270 cm^2	Q6	Let each shop sell k cookies. Original: A = $\frac{5}{2}$k; B = 2k; C = 4k (a) Sold fraction = $3k \div \frac{17}{2}k = \frac{6}{17}$ (b) Left = $\frac{11}{17} \times 935 = 605$ cookies Answers: (a) $\frac{6}{17}$; (b) 605
Q7	Box B has 8 parts; Box A has 24 parts. A P:E = 4:20; B P:E = 5:3 (a) (4 + 5):(20 + 3) = 9:23 (b) Box B = $8 \times (30 \div 3) = 80$; Box A = 240 Answers: (a) 9:23; (b) 240	Q8	 (c) 6 joins give 12 unpainted faces. Face area = $432 \div 12 = 36$ cm^2; side = 6 cm Volume = $7 \times 6 \times 6 \times 6 = 1512$ cm^3
Q9	For every 8 beads: 5 wood + 3 glass Mass = $5 \times 10 + 3 \times 15 = 95$ g (a) $1330 \div 95 = 14$ groups; $14 \times 8 = 112$ (b) Wood = 84; glass = 42 $84 \times 10 + 42 \times 15 = 1470$ g = 1.47 kg	Q10	Let last year's girls = g; boys = g + 80. $0.5g + 1.4(g + 80) = 188$; g = 40 (a) Boys this year = $1.4 \times 120 = 168$ (b) $168x + 20(x + 2) = 604$; x = 3 Answers: (a) 168 boys; (b) 3 cards

Q11	(a) February: sold 48, unsold 72 48 ÷ (48 + 72) × 100% = 40% (b) (48 + 68 + 52) ÷ 3 = 56 Required average = 56 + 20 = 76 Answers: (a) 40%; (b) 77, 75	Q12	$50 earns (50 ÷ 2.50) × 12 + 80 = 320 points 3 × $50 earns 960 points 36 more points = 3 × 12; extra cost = $7.50 Least amount = $150 + $7.50 = $157.50
Q13	1.5 L = 1500 cm^3 (a) A: 1500 ÷ (50 × 25) = 1.2 cm B: 1500 ÷ (75 × 10) = 2 cm (b) Initial A height = $\frac{1}{4}$ × 48 = 12 cm 12 + 1.2t = 2t; t = 15 min	Q14	(a) Rhombus angle at Q = 180° - 76° = 104° QV bisects it: 52°; angle PQW = 128° x = (180° - 128°) ÷ 2 = 26° (b) Angle SWV = 76° - 15° = 61° Angle WVU = 119°; angle RVW = 104° Angle RVU = 15°; y = 180° - 116° - 15° = 49° (c) is not; trapezium
Q15	Radius = 35 ÷ 2 = 17.5 cm (a) 4 × $\frac{1}{2}$ × $\frac{22}{7}$ × 17.5^2 = 1925 cm^2 (b) Total arcs = 4 × $\frac{1}{2}$ × $\frac{22}{7}$ × 35 = 220 cm Straight boundary = 428 - 220 = 208 cm Original width = (208 + 140) ÷ 2 - 64 = 110 cm QR = 110 - 35 - 48 = 27 cm		

3
END