Index No. | | | | | | – | |

MINISTRY OF EDUCATION, SINGAPORE
PRIMARY SCHOOL LEAVING EXAMINATION

0008/1 (A)

PSLE
2023

MATHEMATICS
PAPER 1
(BOOKLET A)

Additional materials: Optical Answer Sheet (OAS)

Total Time for Booklets A and B : 1 hour

INSTRUCTIONS TO CANDIDATES

1. Write your index number in the boxes at the top right-hand corner.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Use a 2B pencil to shade your answers on the Optical Answer Sheet (OAS).
6. The use of calculators is **NOT** allowed.

This booklet consists of 7 printed pages and 1 blank page.

Singapore Examinations and Assessment Board

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 Round 21 345 to the nearest thousand.

(1) 20 000

(2) 21 000

(3) 21 300

(4) 22 000

2 What is the missing number in the box?

$$6\frac{3}{4} = \frac{\square}{4}$$

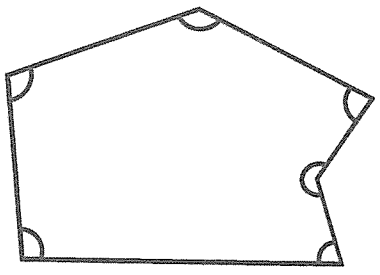
(1) 18

(2) 24

(3) 27

(4) 63

3 How many of the marked angles in the figure are smaller than 90°?



(1) 5

(2) 2

(3) 3

(4) 4

4 $10 + \frac{1}{10} + \frac{1}{1000} =$ _____

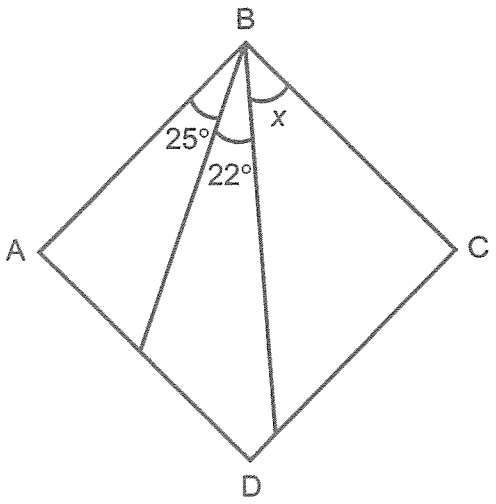
(1) 11.01

(2) 10.11

(3) 10.011

(4) 10.101

5 ABCD is a square. Find $\angle x$.



(1) 43°

(2) 44°

(3) 45°

(4) 47°

6 What is the duration from 09 35 to 14 00?

(1) 4 h 25 min

(2) 4 h 35 min

(3) 5 h 25 min

(4) 5 h 35 min

7 Arrange the fractions from the largest to the smallest: $\frac{7}{12}$, $\frac{3}{7}$, $\frac{7}{10}$

	Largest		Smallest
(1)	$\frac{3}{7}$,	$\frac{7}{10}$,	$\frac{7}{12}$
(2)	$\frac{7}{12}$,	$\frac{7}{10}$,	$\frac{3}{7}$
(3)	$\frac{7}{10}$,	$\frac{3}{7}$,	$\frac{7}{12}$
(4)	$\frac{7}{10}$,	$\frac{7}{12}$,	$\frac{3}{7}$

(Go on to the next page)

8 Which of the following is the same as 2 kg 30 g?

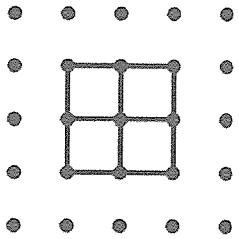
(1) 230 g

(2) 2030 g

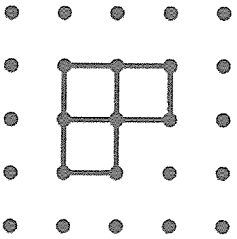
(3) 2300 g

(4) 20 030 g

9 The diagram shows the front view and top view of a solid made with some cubes.

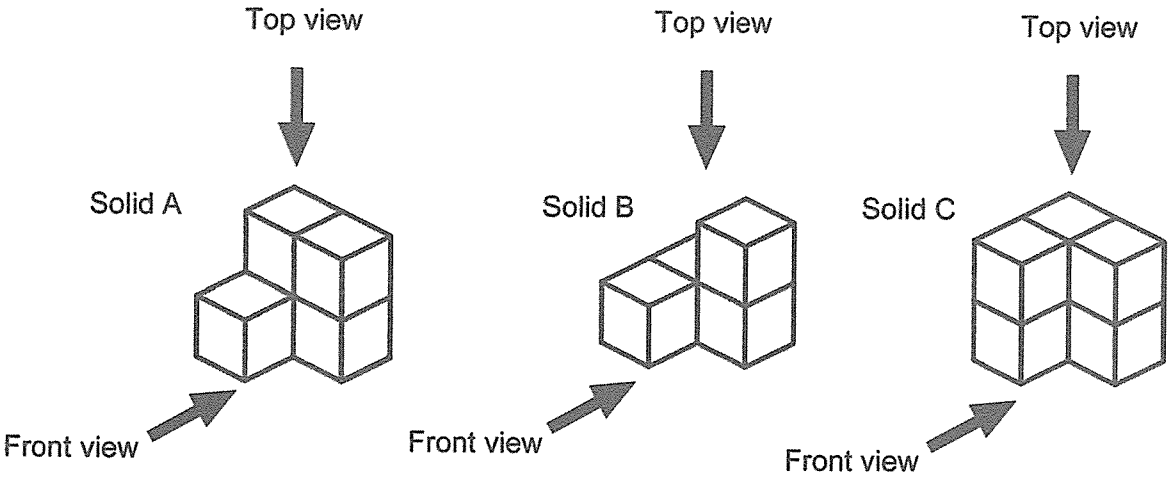


Front view



Top view

Which of the following could be the solid?



(1) A and B only

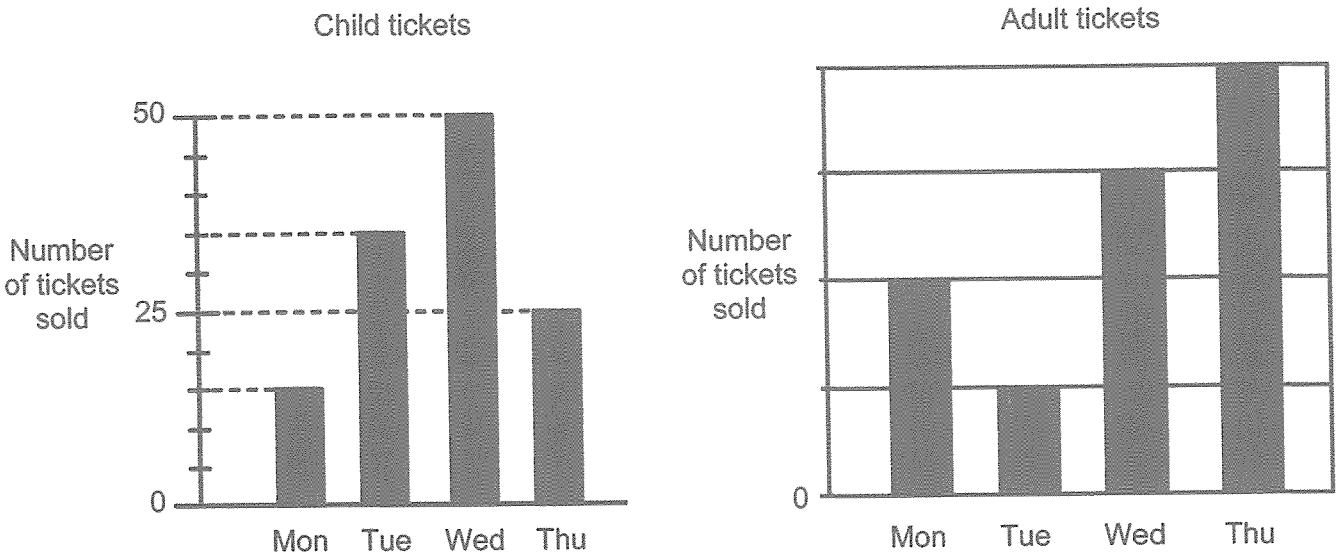
(2) A and C only

(3) B and C only

(4) C only

*Use the information below to answer Questions **10** and **11**.*

The bar graphs show the sale of child tickets and adult tickets to a funfair over four days.
The scale of the graph for adult tickets is not shown.



10 How many child tickets were sold in total on Tuesday and Thursday?

(1) 35

(2) 50

(3) 52

(4) 60

11 The ratio of the number of adult tickets sold on Monday to the total number of tickets sold on that day was 4 : 5. How many adult tickets were sold on Wednesday?

(1) 18

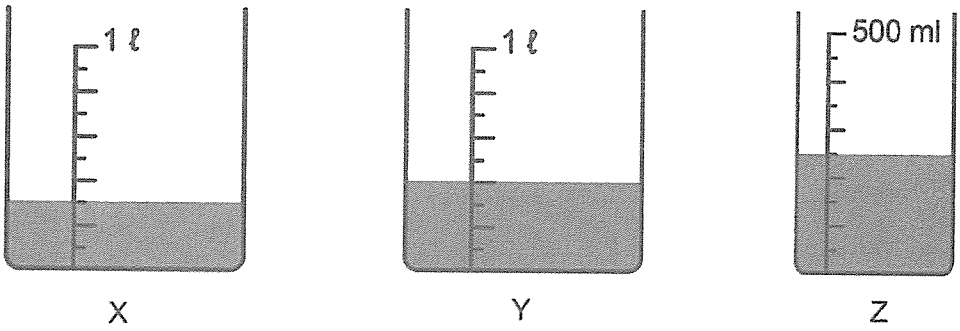
(2) 45

(3) 60

(4) 90

(Go on to the next page)

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



	Most	Least
(1)	Y	X
(2)	Y	Z
(3)	Z	X
(4)	Z	Y

13 A box contains 10¢ and 50¢ coins. The total value of these coins is $3.
What is the largest possible number of coins in the box?

(1) 10

(2) 25

(3) 26

(4) 30

14 Mrs Wong wanted to divide 72 girls and 60 boys equally into as many teams as possible. Each team had the same number of children. The number of boys in each team was the same. How many boys were there in each team?

(1) 12

(2) 2

(3) 5

(4) 6

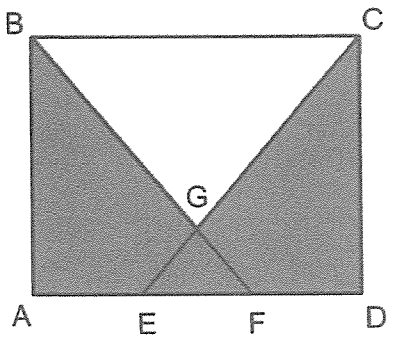
15 ABCD is a rectangle. E and F are points on AD such that AE = EF = FD. The ratio of the area of EGF to that of ABF is 1 : 8. What fraction of ABCD is shaded?

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

(2) $\frac{5}{8}$

(3) $\frac{8}{15}$

(4) $\frac{15}{23}$



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MINISTRY OF EDUCATION, SINGAPORE
PRIMARY SCHOOL LEAVING EXAMINATION

0008/1 (B)

PSLE
2023

MATHEMATICS
PAPER 1
(BOOKLET B)

Total Time for Booklets A and B : 1 hour

INSTRUCTIONS TO CANDIDATES

1. Please check that your name, school and index number are printed **CORRECTLY** on the barcode label before pasting it within the box provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
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.
9. If you use an Additional Booklet to write your answers, paste another of your barcode labels on the cover page of the Additional Booklet. At the end of the examination, you must:
   a. Insert the Additional Booklet(s) between the pages of the **main** Answer Booklet
   b. Write the number of Additional Booklet(s) that you have used in this box ☐

This booklet consists of 7 printed pages and 1 blank page.

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 sixty thousand and fifty-two in numerals.

Ans: _____

17 Find the value of $1705 - 27$

Ans: _____

18 Find the value of $91.8 \div 6$

Ans: _____

19 Find the value of $\frac{5}{6} - \frac{1}{4}$

Ans: _____

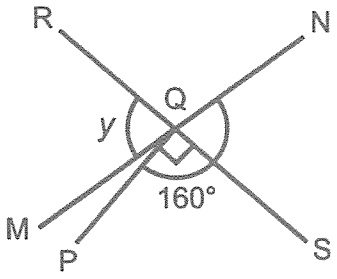
20 Express 1.48 as a mixed number in the simplest form.

Ans: _____

Questions **21** to **30** carry 2 marks each. Show your workings clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

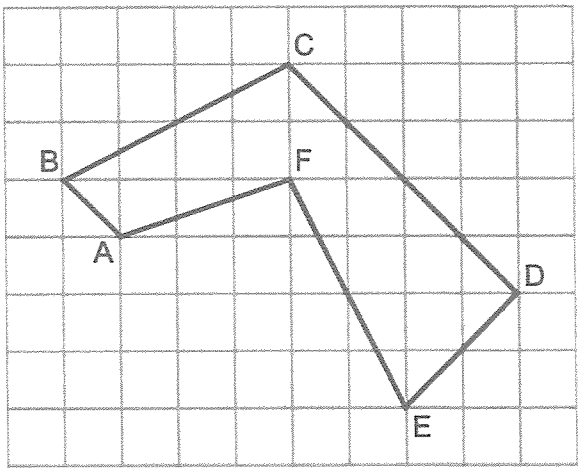
(20 marks)

21 MQN and RQS are straight lines. ∠PQS = 90° and ∠PQN = 160°. Find ∠*y*.



Ans: _____ °

22 Six lines are drawn in the square grid.



(a) Name the line that is perpendicular to CD.

Ans: (a) _____

(b) Name two lines that are parallel to each other.

Ans: (b) _____ and _____

(Go on to the next page)

23 Find the value of the following when $w = 6$.

(a) $2w - 1 + 9w$

Ans: (a) _____

(b) $\frac{7w}{3} - w$

Ans: (b) _____

---

24 The table shows the number of male and female members in a club in June.
The number of female adults is not shown.

Age Group	Number of members in June	
	Male	Female
Youth (Below 20 years)	15	28
Adult (20 to 59 years)	15	?
Senior Citizen (60 years and above)	32	44

(a) 50% of all the female members in the club were adults.
How many female adults were there in the club?

Ans: (a) _____

(b) In July, some female adults left the club. There was no change in the number of members in the other 5 groups. Did the percentage of male members in the club increase, decrease or remain the same from June to July?

Ans: (b) _____

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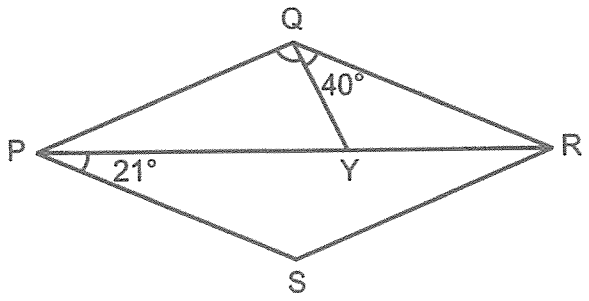
25 PQRS is a rhombus. PYR is a straight line. Find ∠PQY.



Ans: _____°

---

26 Kalai threw a ball at a hoop 30 times. One point was scored when the ball passed through the hoop and one point was deducted when the ball did not.

For Kalai's first 25 throws, the ball passed through the hoop 20 times.

(a) What was Kalai's score from the first 25 throws?

Ans: (a) _____

(b) At the end of 30 throws, Kalai scored 18 points. How many times did the ball pass through the hoop for her last 5 throws?

Ans: (b) _____

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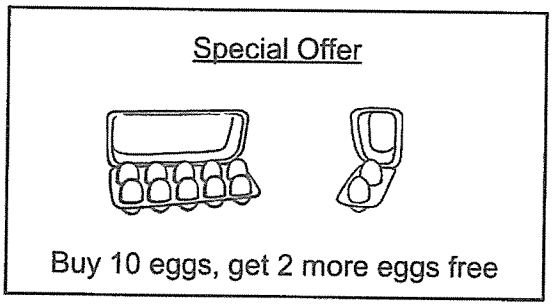
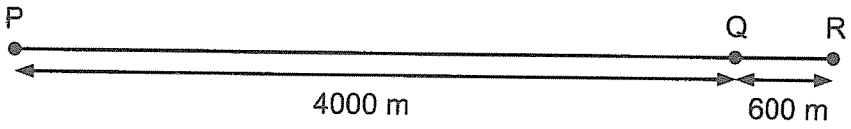
27



Mrs Lim took home 120 eggs. She paid $4.80 less with the special offer.
What was the price of 10 eggs without the special offer?

Ans: $ _____

28 Faizal and Elise started jogging at the same time from point P to point R along the route shown. Faizal jogged 30 m/min faster than Elise. When Faizal reached point R, he turned around at once to jog towards point P. He met Elise at point Q. They did not change their speeds throughout.



What was Elise's jogging speed in m/min?

Ans: _____ m/min

29 Gopal had 3 identical tins of paint that were completely filled. He poured 760 ml out from each tin. The total amount of paint left in the 3 tins after pouring was equal to the amount of paint in 1 tin at first. What was the amount of paint in each tin at first?

Ans: _____ ml

---

30 Students in a camp are put into teams A and B. $\frac{3}{5}$ of the students are in Team A and the rest are in Team B. Each team has the same number of girls. $\frac{1}{4}$ of the students in Team A are girls.

Each of the statements below is either true, false or not possible to tell from the information given. Put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
The total number of students in the camp is a multiple of 5.			
There are fewer boys in Team A than in Team B.			
$\frac{3}{8}$ of the students in Team B are girls.			

End of Paper

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MINISTRY OF EDUCATION, SINGAPORE
PRIMARY SCHOOL LEAVING EXAMINATION

0008/2

PSLE
2023

MATHEMATICS
PAPER 2

Time : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

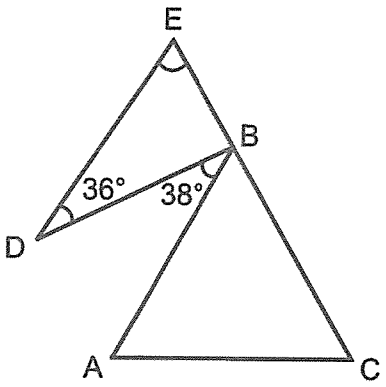
1. Please check that your name, school and index number are printed **CORRECTLY** on the barcode label before pasting it within the box provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Use a dark blue or black ballpoint pen to write your answers in the space provided for each question.
6. The use of an approved calculator is allowed.
7. Do not use correction fluid/tape.
8. Do not use highlighters on any part of your answers.
9. If you use an Additional Booklet to write your answers, paste another of your barcode labels on the cover page of the Additional Booklet. At the end of the examination, you must:
   a. Insert the Additional Booklet(s) between the pages of the **main** Answer Booklet
   b. Write the number of Additional Booklet(s) that you have used in this box ☐

This booklet consists of 15 printed pages and 1 blank page.

Questions 1 to 5 carry 2 marks each. Show your workings clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

1 ABC is an equilateral triangle. EBC is a straight line.
Find ∠DEB.



Ans: _____°

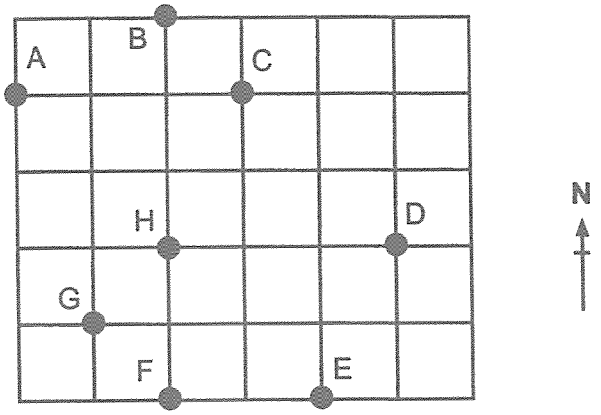
2 Some students collected a total of 95 kg of cans to raise funds.
They were paid $43.80 for all the cans based on the rates below.
The amount paid for each additional kilogram of cans collected is not shown.

Mass of cans	Rate
First 80 kg	$0.45 per kg
Each additional kg	?

How much were the students paid for each additional kilogram of cans collected?

Ans: $ _____

3 The square grid shows the positions of eight points.



(a) Fill in the blanks with north, south, east or west.

F is _____ of B and _____ of E.

(b) Devi stood at one of the points facing H. After she turned 45°, she faced C.
Write down all the possible points where Devi could be standing.

Ans: (b) _____

---

4 A group of students stood in three rows. The 1st row had $10y$ students.
The 2nd row had $4y$ fewer students than the 1st row.
The 3rd row had 2 more students than the 2nd row.

(a) Find the number of students in the 3rd row in terms of y.
Give your answer in the simplest form.

Ans: (a) _____

(b) There were 44 students in the 3rd row. Find the value of y.

Ans: (b) _____

(Go on to the next page)

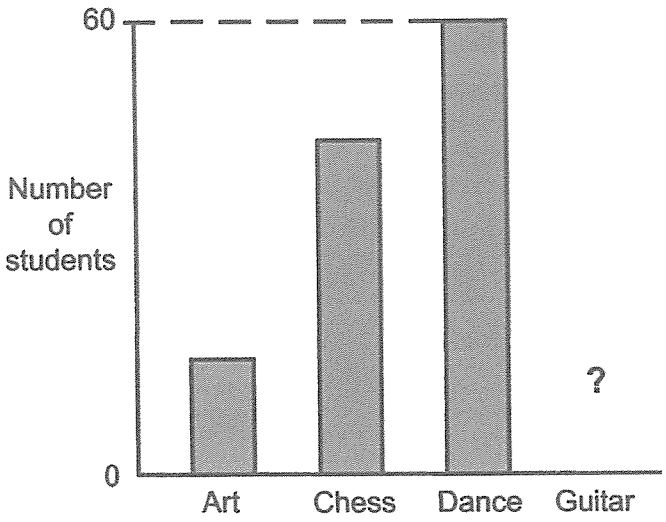
5 Sam kept pens in bags A and B. Bag A contained twice as many pens as bag B. In bag A, $\frac{1}{5}$ of the pens were red pens. In bag B, $\frac{1}{3}$ of the pens were red pens.

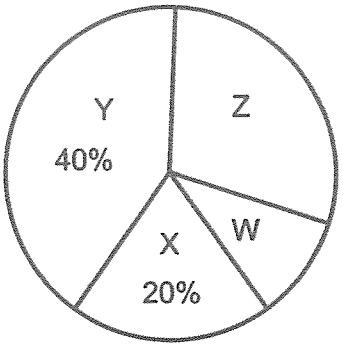
What fraction of Sam's pens were red pens?

Ans: _____

For questions **6** to **17**, show your workings 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 Students joined one of the four clubs. The bar graph represents the number of students in the clubs. The bar for Guitar Club is not shown. There were twice as many students in the Guitar Club as in the Art Club.





The information is also represented by a pie chart. The names of the clubs are represented by the labels W, X, Y and Z.

(a) Fill in the blanks with the labels W, X, Y and Z.

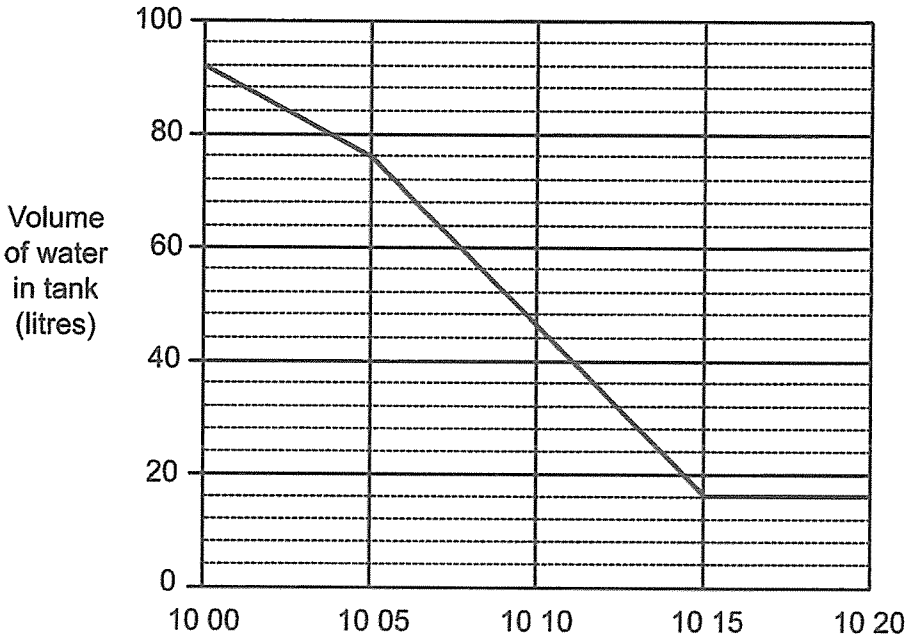
Name of club	Art	Chess	Dance	Guitar
Label				

[2]

(b) How many students were there altogether?

Ans: (b) _____ [1]

7 Water could flow out of a tank through tap A and tap B. At first, Jon turned on tap A. After some time, he also turned on tap B so that more water flowed out. Later, he turned off both taps at the same time. The line graph shows the volume of water in the tank from 10 00 to 10 20.



(a) What was the rate of flow of water from tap A in litres per minute?

Ans: (a) _____ [1]

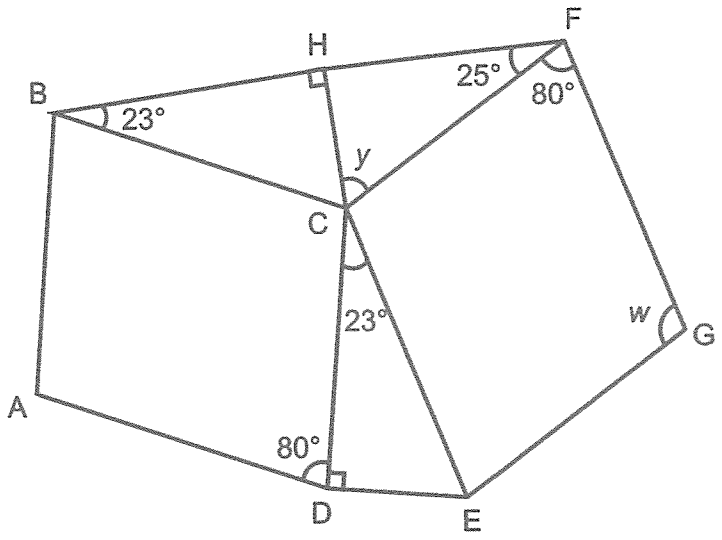
(b) How many litres of water flowed out of the tank throughout the period when both taps were turned on?

Ans: (b) _____ [1]

(c) What was the rate of flow of water from tap B in litres per minute?

Ans: (c) _____ [2]

8 ABCD and CFGE are identical parallelograms. HCB and EDC are identical right-angled triangles.



(a) Find $\angle w$.

Ans: (a) _____ [1]

(b) Find $\angle y$.

Ans: (b) _____ [2]

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

BHF **(is / is not)** a straight line because the sum of angles BHC and CHF **(is / is not)** 180°.

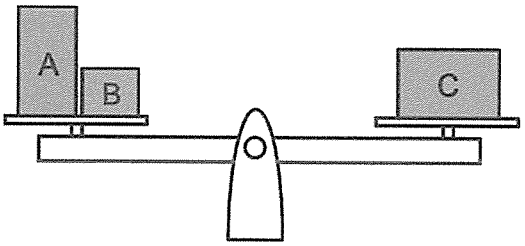
[1]

9 Peggy spent 75% of her money on a calculator. She spent 40% of the remainder on a book. After that, she had $6.90 left. How much money did Peggy have at first?

Ans: _____ [3]

---

10 The figure shows three boxes A, B and C on a balance scale.



The average mass of the three boxes is 240 g. The mass of B is a 2-digit number. What is the smallest possible difference between the mass of A and B?

Ans: _____ [3]

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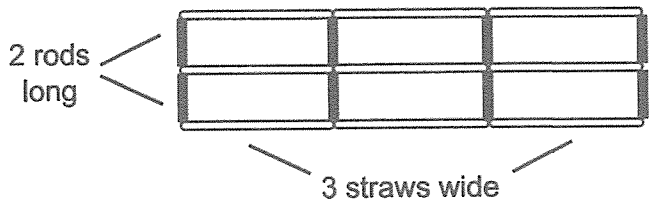
11 Jean used a total of 17 rods and straws to form a rectangular grid that was 2 rods long and 3 straws wide as shown.

Jean's grid



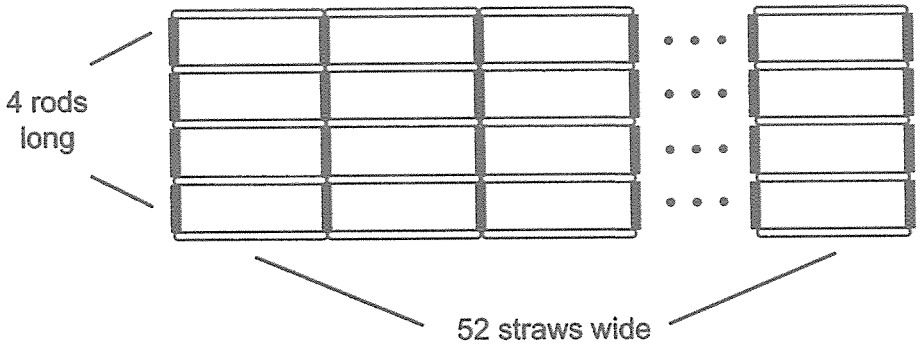
(a) Jean added more rods and straws to form a larger rectangular grid. The grid was 3 rods long and 4 straws wide. How many rods and straws were there in this grid?

Ans: (a) Number of rods: _____

Number of straws: _____ [1]

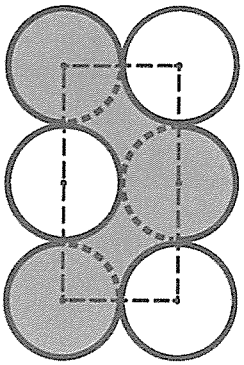
(b) Leong also used some rods and straws to form another rectangular grid. Part of his grid is as shown. What was the total number of rods and straws used?

Leong's grid



Ans: (b) _____ [2]

12 The figure shows 6 circles, each of radius 7 cm. Each circle touches the circles next to it.



(Take $\pi = \frac{22}{7}$)

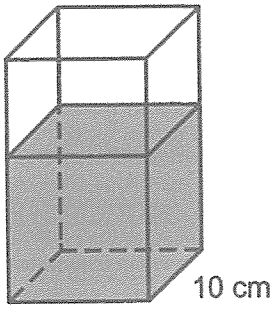
(a) Find the perimeter of the shaded part.

Ans: (a) _____ [2]

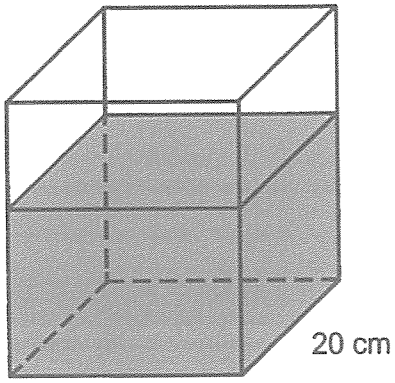
(b) Find the area of the shaded part.

Ans: (b) _____ [2]

13 There was a total of 21 400 cm^3 of water in rectangular tanks X and Y at first.
The height of the water level in tank Y was 5 cm above that of tank X.



Tank X



Tank Y

(a) Find the height of the water level in tank X.

Ans: (a) _____ [2]

(b) Ann poured 3300 cm^3 of water out of tank Y.
Tank Y was then half filled with water.
What was the height of tank Y?

Ans: (b) _____ [2]

(Go on to the next page)

14 Colin had a collection of badges, postcards and magnets. He had 85 badges. 30% of his collection was postcards. He had 51 fewer postcards than magnets.

(a) How many postcards did Colin have?

Ans: (a) _____ [2]

(b) Colin gave away some postcards. His total collection decreased by 20%. What percentage of his collection was postcards after that?

Ans: (b) _____ [3]

15 Meiyi had some books. She donated $\frac{3}{8}$ of the books and gave away another 24 books. She had $\frac{4}{7}$ of the books left and she packed them into 20 boxes. Some boxes contained 10 books while the rest contained 18 books.

(a) How many books were packed into the 20 boxes?

Ans: (a) _____ [2]

(b) How many boxes contained 18 books?

Ans: (b) _____ [2]

16 Figure 1 shows a triangular card PQR with PQ = QR. A number of such cards were arranged along the four sides of a rectangular board. Figure 2 shows part of the arrangement. A total of 24 pins were placed at an equal distance of 40 cm apart to hold the cards.

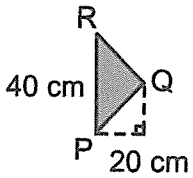


Figure 1

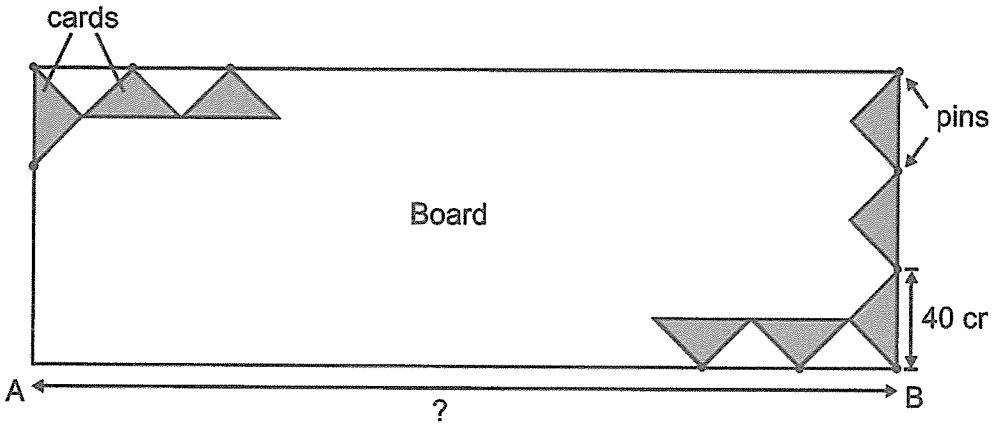


Figure 2

(a) Find the length of AB.

Ans: (a) _____ [2]

(b) Find the total area of the cards used.

Ans: (b) _____ [2]

17 Figure 1 shows a trapezium which has a perimeter of 96 cm. Jiayu joins three such trapeziums to form Figure 2 which has a perimeter of 204 cm.

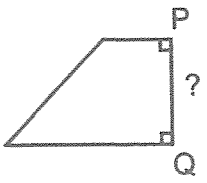


Figure 1

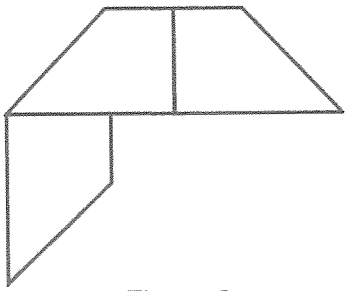


Figure 2

(a) Find the length of PQ.

Ans: (a) _____ [2]

(b) Jiayu joins another four such trapeziums to form Figure 3 which has an area of 1932 cm^2. Find the length of RS.

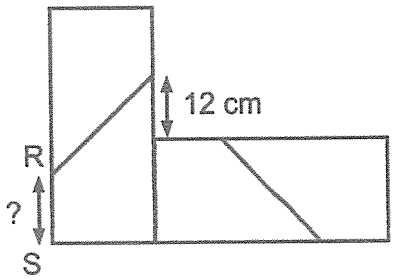


Figure 3

Ans: (b) _____ [2]

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