



RAFFLES GIRLS' PRIMARY SCHOOL
PRELIMINARY EXAMINATION
PRIMARY 6
2026

MATHEMATICS
PAPER 1
(BOOKLET A)

Name: _____ () Date: 20 August 2026

Class: P6 _____

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

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the spaces provided above.
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.

Paper 1	50
Paper 2	50
Total score out of 100	
Parent's Signature	

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 on the Optical Answer Sheet.
(26 marks)

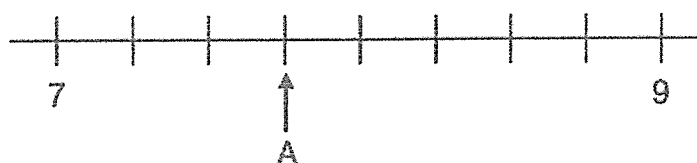
1. What does the digit 6 in 142 687 stand for?

- (1) 60
- (2) 600
- (3) 6000
- (4) 60 000

2. In 32.14, which digit is in the tenths place?

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

3. In the number line, what is the value represented by A?



- (1) 7.30
- (2) 7.60
- (3) 7.75
- (4) 8.25

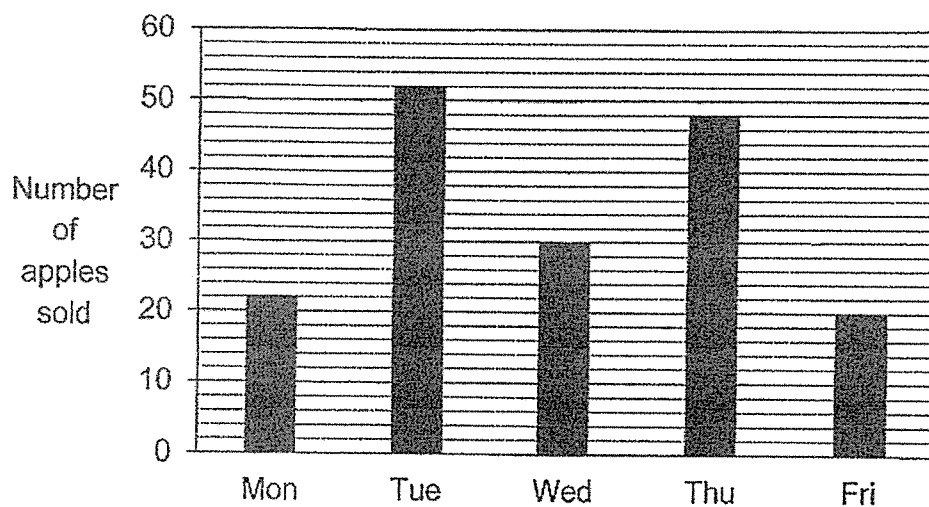
(Go on to the next page)

4. What is the missing number in the box?

$$4\frac{5}{8} = \frac{\boxed{}}{8}$$

- (1) 20
- (2) 32
- (3) 37
- (4) 45

5. The bar graph shows the number of apples sold in a shop from Monday to Friday.

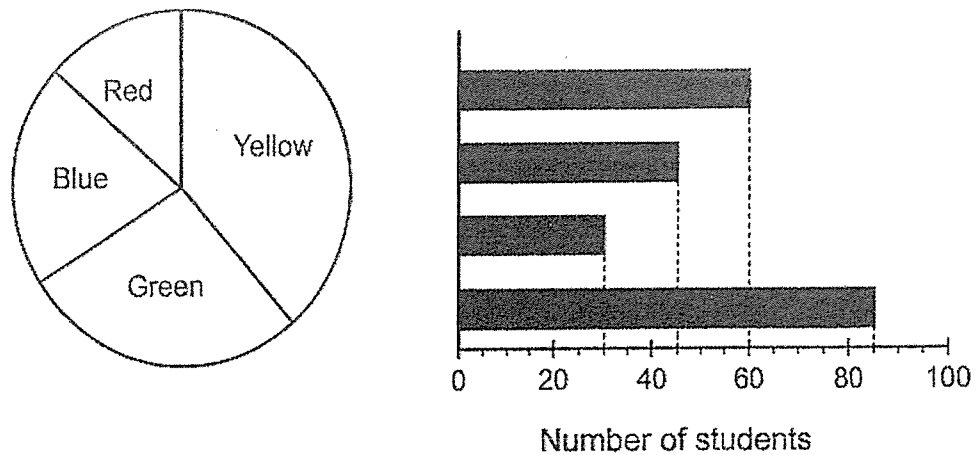


On which two days were 78 apples sold altogether?

- (1) Monday and Tuesday
- (2) Thursday and Friday
- (3) Tuesday and Wednesday
- (4) Wednesday and Thursday

(Go on to the next page)

6. The pie chart shows the favourite colours of students in a school. The information is shown in a bar graph but the names of the colours are not shown on the bar graph.



How many more students prefer yellow to red?

- (1) 25
 - (2) 35
 - (3) 40
 - (4) 55
7. Round 4.675 to the nearest hundredth.

- (1) 4.60
- (2) 4.67
- (3) 4.68
- (4) 4.70

(Go on to the next page)

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

$$\frac{5}{3}, \quad 1\frac{5}{6}, \quad \frac{7}{6}$$

Smallest

Largest

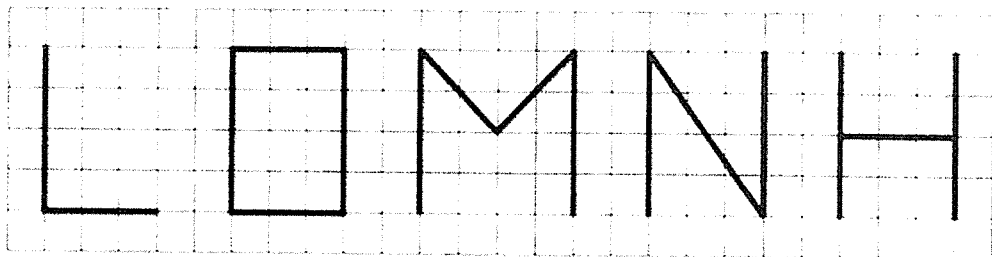
(1) $\frac{5}{3}, \quad \frac{7}{6}, \quad 1\frac{5}{6}$

(2) $1\frac{5}{6}, \quad \frac{5}{3}, \quad \frac{7}{6}$

(3) $\frac{7}{6}, \quad 1\frac{5}{6}, \quad \frac{5}{3}$

(4) $\frac{7}{6}, \quad \frac{5}{3}, \quad 1\frac{5}{6}$

9. Five letters are drawn on the square grid.



How many of the letters have both parallel and perpendicular lines?

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

(Go on to the next page)

10. The table shows the points scored by a group of children at a fun fair.

Points scored	1	2	3	4	5
Number of children	7	?	8	6	6

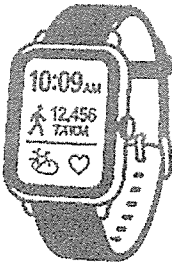
$\frac{1}{2}$ of the children scored fewer than 3 points. How many children scored exactly 2 points?

- (1) 13
- (2) 20
- (3) 33
- (4) 40

- 11.

SALE

30% discount
off the usual price



Raju paid \$210 for a smart watch during the sale. What was the usual price of the smart watch before discount?

- (1) \$147
- (2) \$273
- (3) \$300
- (4) \$700

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12. In the television guide shown, one programme leads to another without any break in between.

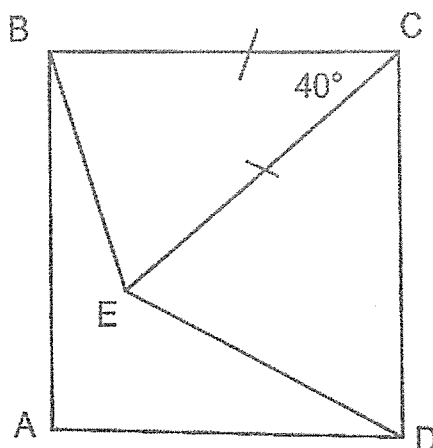
Start time	Programme
8.00 a.m.	News
8.35 a.m.	Sports
10.00 a.m.	Movie
12.05 p.m.	Documentary

How much shorter is the Sports programme than the Movie?

- (1) 35 min
- (2) 40 min
- (3) 1h 20 min
- (4) 1h 25 min
13. Mathew wanted to buy 9 buns but found that he was short of \$6.80. In the end, he bought 5 buns and had \$1.20 left. How much money did Mathew have at first?
- (1) \$10.00
- (2) \$11.20
- (3) \$13.80
- (4) \$16.80

(Go on to the next page)

14. In the figure, ABCD is a square. $BC = CE$ and $\angle BCE = 40^\circ$. Find $\angle EDA$.



- (1) 20°
 (2) 25°
 (3) 40°
 (4) 65°
15. The first 16 numbers of a number pattern are given below.

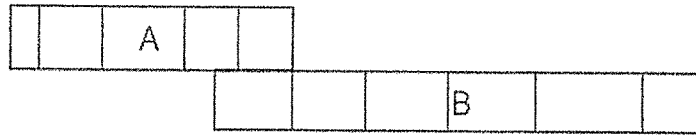
2 1 4 3 2 1 4 3 2 1 4 3 2 1 4 3
 1st 16th

What is the sum of the first 97 numbers?

- (1) 240
 (2) 242
 (3) 243
 (4) 247

(Go on to the next page)

16. Amber put two sticks, A and B, side by side, as shown.



$\frac{2}{7}$ of A and $\frac{1}{6}$ of B are overlapped as shown. The length of B is 10 cm longer than the length of A. What is the length of A? _____

- (1) 70 cm
(2) 24 cm
(3) 14 cm
(4) 12 cm
17. Alex needs 100 pieces of wire, each 3 m long. The wire is sold in rolls of 20 m. What is the least number of rolls of wire Alex must buy?

- (1) 6
(2) 15
(3) 16
(4) 17

(Go on to the next page)

18. Figure 1 shows a trapezium with 3 sides of equal length. AD is 7 cm longer than BC. Marcus joins 4 such trapeziums to form Figure 2 which has a perimeter of 64 cm. Find the perimeter of 1 trapezium.

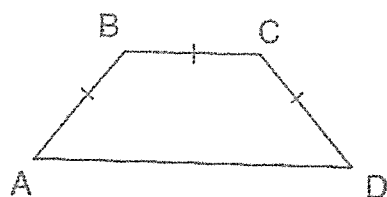


Figure 1

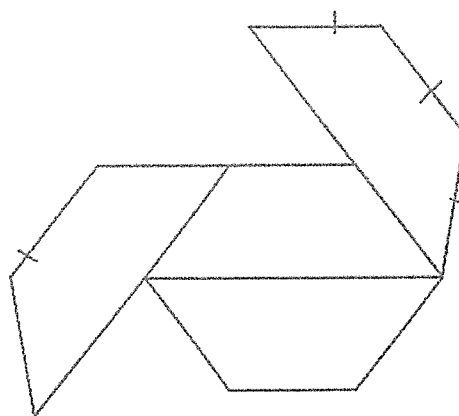
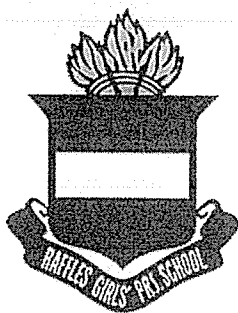


Figure 2

- (1) 12 cm
- (2) 16 cm
- (3) 23 cm
- (4) 27 cm

(Go on to Booklet B)

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RAFFLES GIRLS' PRIMARY SCHOOL
PRELIMINARY EXAMINATION
PRIMARY 6
2026

MATHEMATICS
PAPER 1
(BOOKLET B)

Name: _____ ()

Date: 20 August 2026

Class: P6 _____

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

INSTRUCTIONS TO CANDIDATES

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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.

Score	24
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Questions 19 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. (24 marks)

19. (a) Find the value of $10 - 2 \times 4$

Ans: (a) _____

(b) Find the value of $2525 \div 5$

Ans: (b) _____

20. (a) Find the value of $10.53 - 6.89$

Ans: (a) _____

(b) Find the value of 0.745×60

Ans: (b) _____

(Go on to the next page)



21. (a) Find the value of $\frac{1}{3} + \frac{1}{2}$

Ans: (a) _____

- (b) Find the value of $\frac{2}{7} \div 4$

Ans: (b) _____

22. At a cafe, 6 kg 90 g of coffee beans were used in the morning.

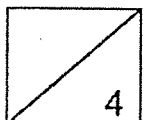
- (a) Express the mass of coffee beans used in kilograms.

Ans: (a) _____ kg

- (b) In the afternoon, 20.8 kg of coffee beans were repacked equally into 4 packets. How many kilograms of coffee beans were in each packet?

Ans: (b) _____ kg

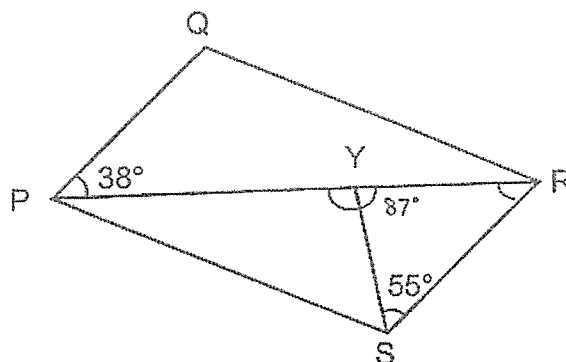
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23. Mindy had 13.04 m of cloth. She cut 12 shorter pieces of length 85 cm each from it. How much cloth had she left? Give your answer in metres and centimetres.

Ans: _____ m _____ cm

24. PQRS is a parallelogram. PYR is a straight line. Find $\angle PYS$.



Ans: _____ °

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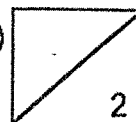
25. (a) Simplify the following expression.

$$25p + 12 - 5p - 8$$

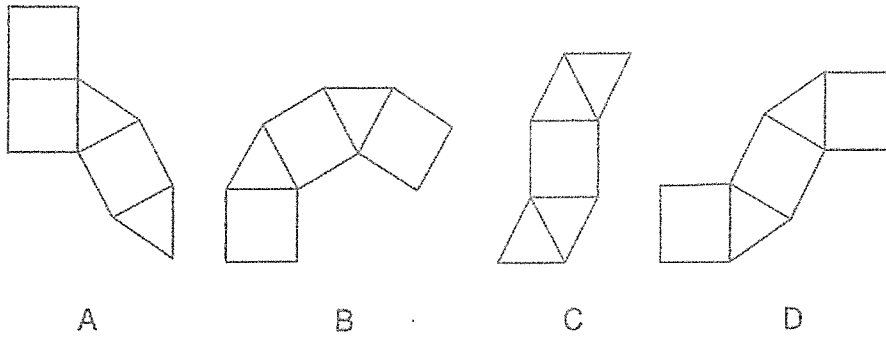
Ans: (a) _____

- (b) Find the value of $7k - \frac{4k}{3}$ when $k = 6$.

Ans: (b) _____

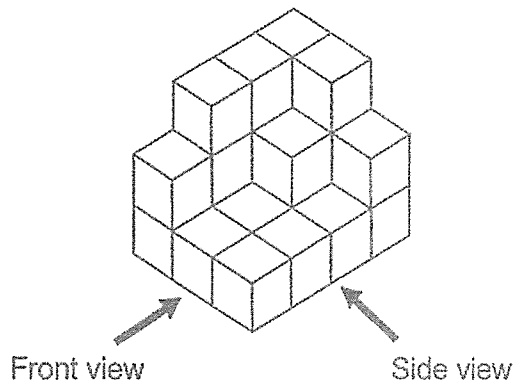


26. (a) Name all the figures that are nets of a prism.

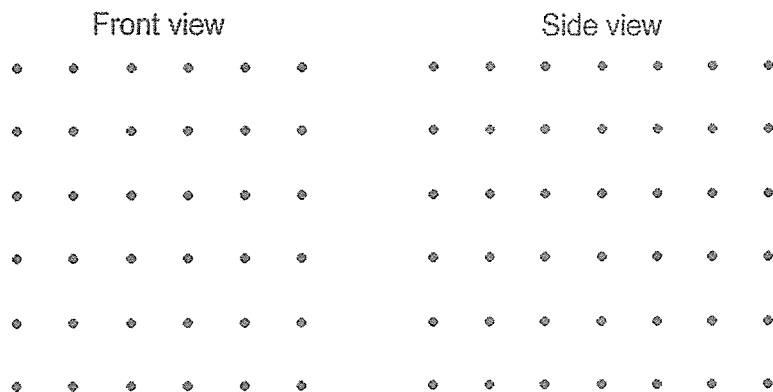


Ans: (a) _____

- (b) The solid below was formed using 23 unit cubes.



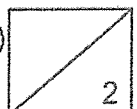
Nadia removed some unit cubes from the solid. After that, the front view and side view are as shown.



Find the least number of cubes that Nadia could have removed.

Ans: (b) _____

(Go on to the next page)



27. The table shows Chloe's scores for 4 games. The score for the 3rd game is missing. The average score for the 4 games is 16.

Game	Score
1 st	18
2 nd	12
3 rd	?
4 th	13

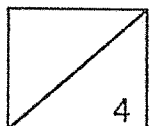
What is Chloe's score for the 3rd game?

Ans: _____

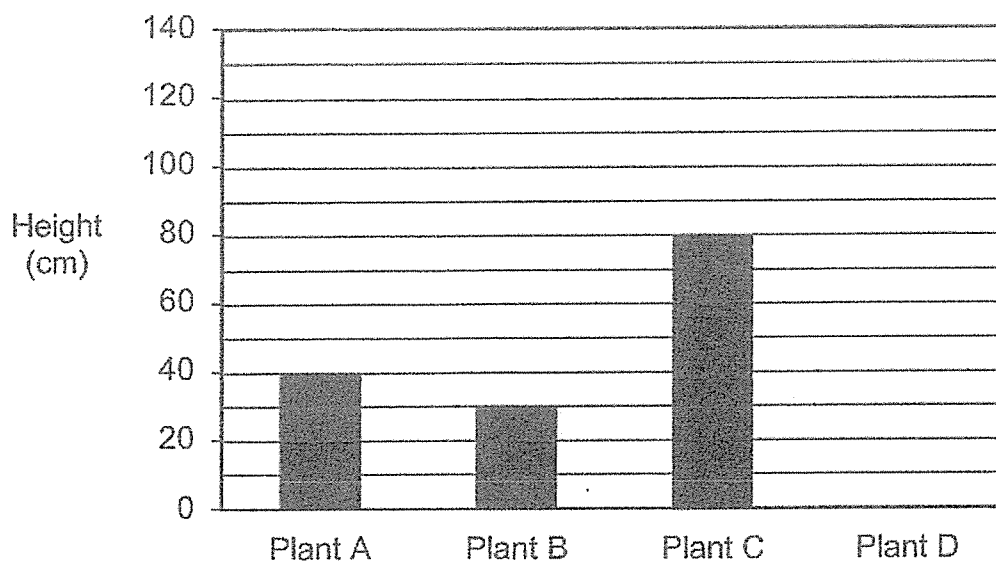
28. At a concert, the ratio of the number of adults to the number of children is 4 : 3. The ratio of the number of boys to the number of girls is 1 : 5. There are 160 more girls than boys. How many adults are there?

Ans: _____

(Go on to the next page)

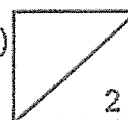


29. The bar graph shows the height of some plants. The bar representing the height of Plant D is not shown.

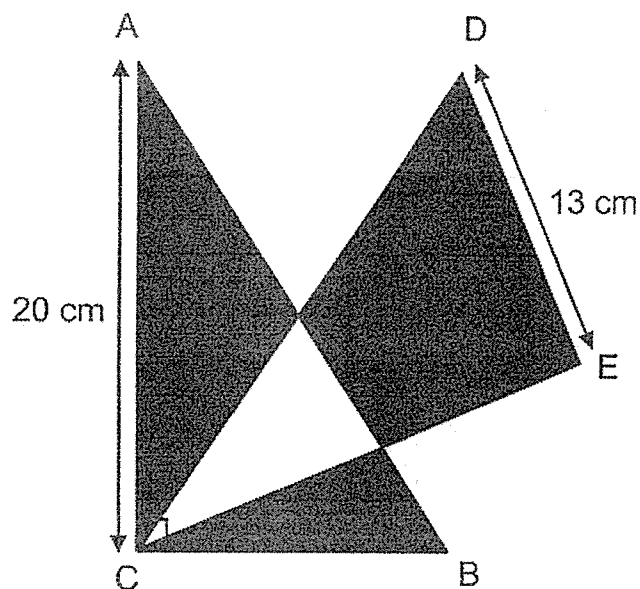


The height of Plant D is $\frac{2}{5}$ of the total height of all the plants. Find the total height of the 4 plants.

Ans: _____ cm



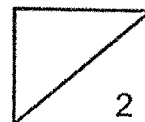
30. In the figure, ABC and CDE are identical right-angled triangles. The total area of the shaded parts is 172 cm^2 . Find the area of the unshaded part.



Ans: _____ cm^2

End of Paper

⊗ Please check your work carefully ⊗





RAFFLES GIRLS' PRIMARY SCHOOL
PRELIMINARY EXAMINATION
PRIMARY 6
2026

MATHEMATICS
PAPER 2

Name: _____ ()

Date : 20 August 2026

Class: P6 _____

Time : 1 hour 20 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the spaces provided above.
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.

Score	50
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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)

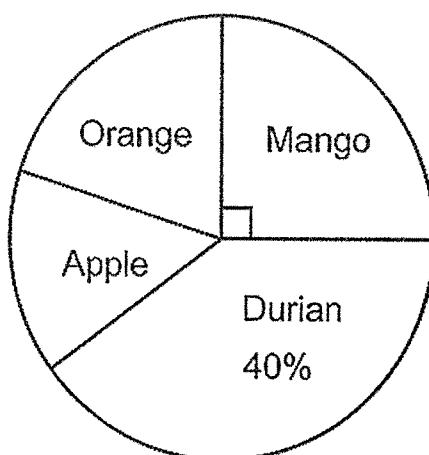
1. (a) Find the largest multiple of 8 that is smaller than 75.

Ans: (a) _____

- (b) Find all the common factors of 24 and 9.

Ans: (b) _____

2. The pie chart shows the favourite fruits chosen by the students in a school.



Each statement is either true, false or not possible to tell from the pie chart given above. Put a tick (✓) to indicate your answer.

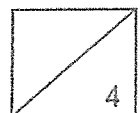
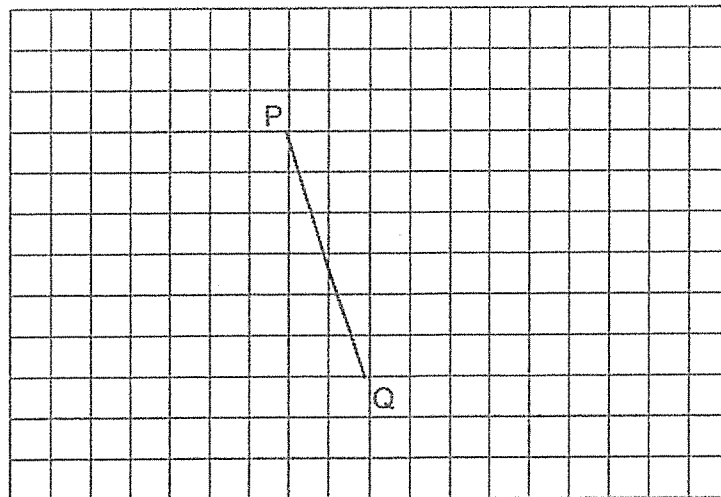
Statement	True	False	Not possible to tell
40 students chose durian as their favourite fruit.			
25% of the students chose mango as their favourite fruit.			

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3. A tank was filled with 45 litres of water. Water flowed out of the tank at a rate of 250 ml per minute. How many litres of water was left in the tank after 1 hour?

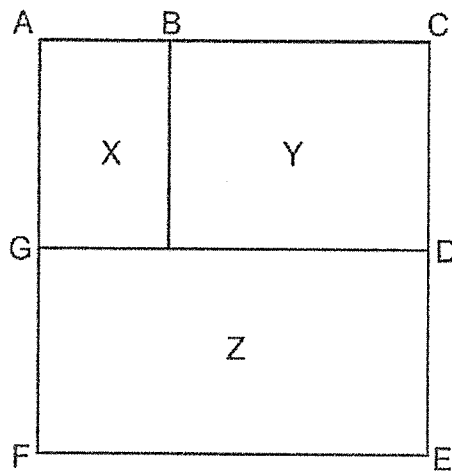
Ans: _____ l

4. The square grid shows line PQ.
PQ is one side of a rectangle PQRS. PQ is twice as long as PS.
Draw and label rectangle PQRS in the square grid.



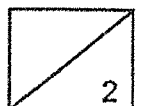
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5. ACEF is a square made up of 3 rectangles X, Y, Z. The area of Z is $\frac{1}{2}$ of the area of square ACEF. The length of BC is twice the length of AB. The length of DE is 18 cm. Find the area of rectangle Y.



Ans: _____ cm²

(Go on to the next page)



For questions 6 to 15, show your workings 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 brackets [] at the end of each question or part-question. (40 marks)

6. A bottle of perfume cost $\$4w$. It cost $\$20$ less than a handbag but $\$9$ more than a scarf. A group of 5 friends bought a handbag and a scarf as a gift and shared the cost equally.

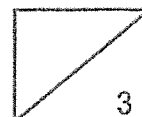
- (a) How much did each person pay for the gift? Give your answer in terms of w in the simplest form.

Ans: (a) \$ _____ [2]

- (b) What was the amount each person paid when $w = 13$?

Ans: (b) \$ _____ [1]

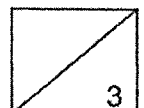
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7. The Green Club collected 960 bottles in February. This was an increase of 60% from January. In March, the number of bottles collected decreased by 25% from February. What was the percentage increase in the number of bottles collected in March compared to January?

Ans: _____ % [3]

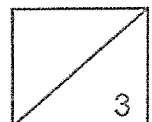
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8. 5 players booked a tennis court and took turns to play on the court. At any time, there were 4 players playing on the court. Each player played for 144 minutes. How long did they book the tennis court for?

Ans: _____ h [3]

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9. The table shows the masses of 3 boys.

Name	Mass
Ahmad	39 kg
Bala	34 kg
Caleb	50 kg

- (a) Find the average mass of the 3 boys.

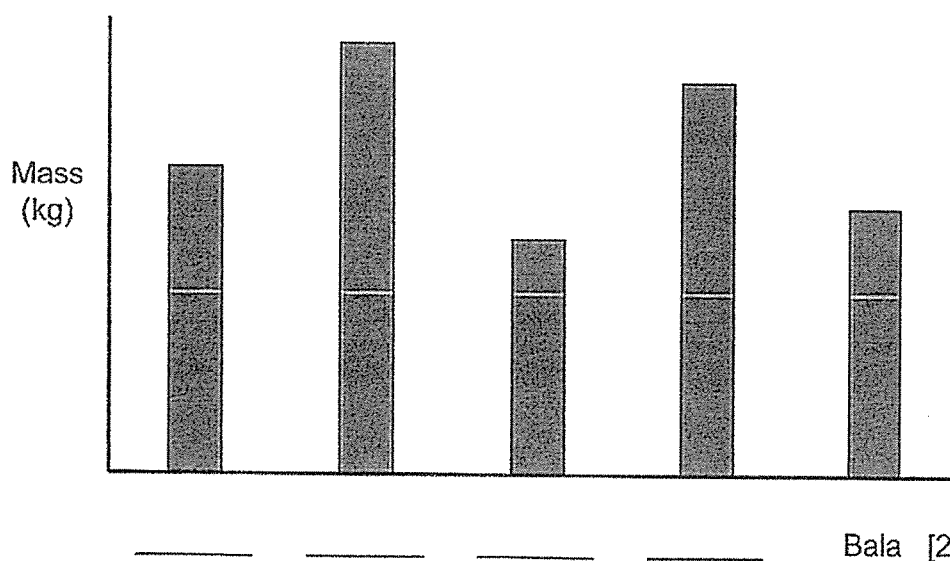
Ans: (a) _____ kg [1]

- (b) Another boy, Daniel with a mass of 55 kg, joined the 3 boys. Will the average mass of the 4 boys increase or decrease?

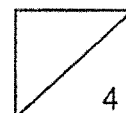
Ans: (b) _____ [1]

- (c) A fifth boy, Eng Huat, joined the group. The bar graph represents the masses of the five boys. Bala was labelled as shown.

Label the bar graph by writing **A** for Ahmad, **C** for Caleb, **D** for Daniel and **E** for Eng Huat in the blanks below.

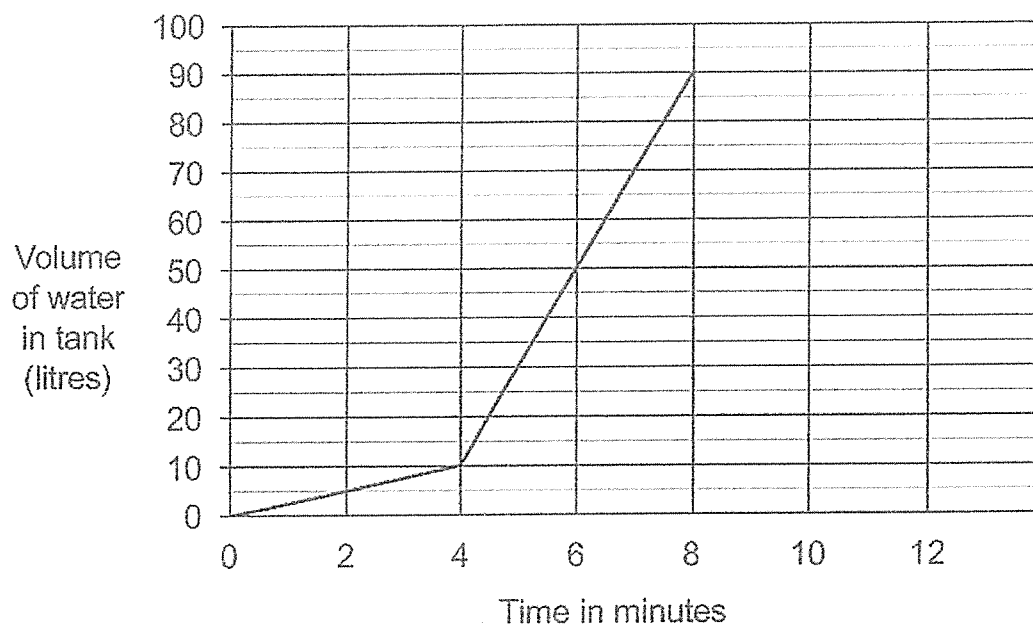


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10. Fiona filled a tank with water using two taps. She turned on Tap A first. After 4 minutes, she also turned on Tap B. Both taps were turned off at the same time when the tank was completely filled without overflowing.

The graph below shows the amount of water in the tank over 12 minutes.



- (a) How many litres of water flowed from Tap A per minute?

Ans: (a) _____ ℓ [1]

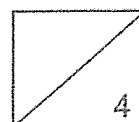
- (b) What was the capacity of the tank?

Ans: (b) _____ ℓ [1]

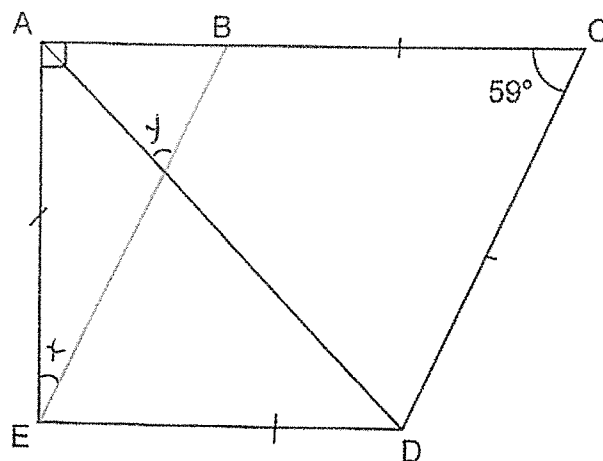
- (c) After both taps were turned off, what fraction of the tank was filled with water from Tap B?

Ans: (c) _____ [2]

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11. In the figure, ACDE is a trapezium and BCDE is a parallelogram. AD is a straight line and $AE = ED$. $\angle BAE$ is a right angle.



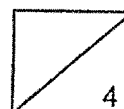
- (a) Find $\angle x$.

Ans: (a) _____° [2]

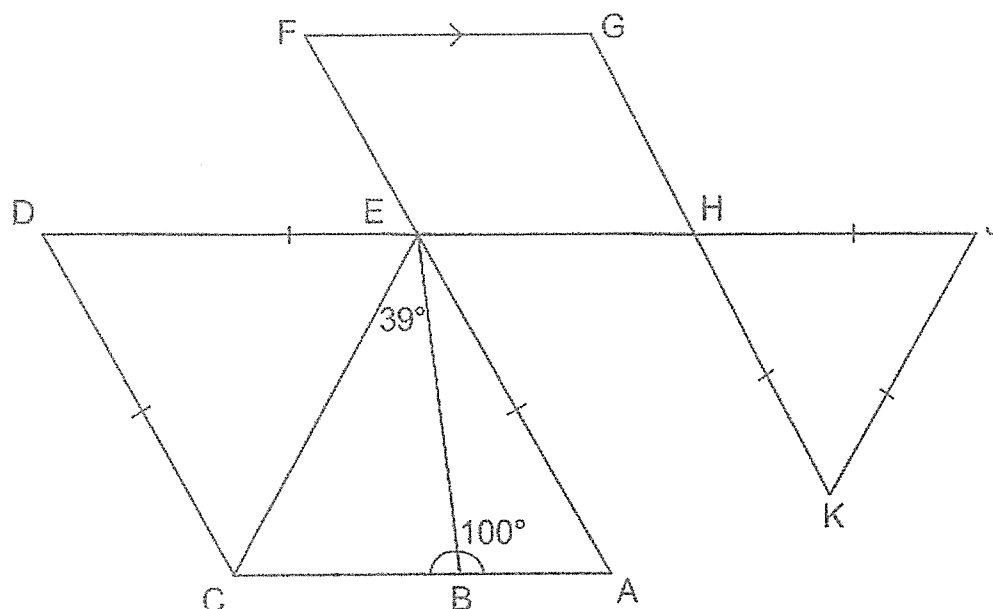
- (b) Find $\angle y$.

Ans: (b) _____° [2]

(Go on to the next page)



12. In the figure, ACDE is a rhombus and HJK is an equilateral triangle. FG is parallel to DJ. FEA, GHK and DEHJ are straight lines. $\angle EBA = 100^\circ$ and $\angle CEB = 39^\circ$.



- (a) Find $\angle EAC$.

Ans: (a) _____ [2]

- (b) Find $\angle FEH$.

Ans: (b) _____ [1]

- (c) Circle the words that describe EFGH correctly in the statement.

[1]

EFGH is a (parallelogram / trapezium)

because FE (is / is not) parallel to GH.

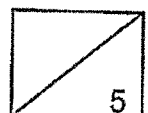
13. Mrs Menon baked some cookies. She packed $\frac{3}{5}$ of the cookies equally into 6 large tins and $\frac{1}{4}$ of the remaining cookies equally into 4 small tins. The rest of the cookies were given away.

(a) What fraction of the cookies was given away?

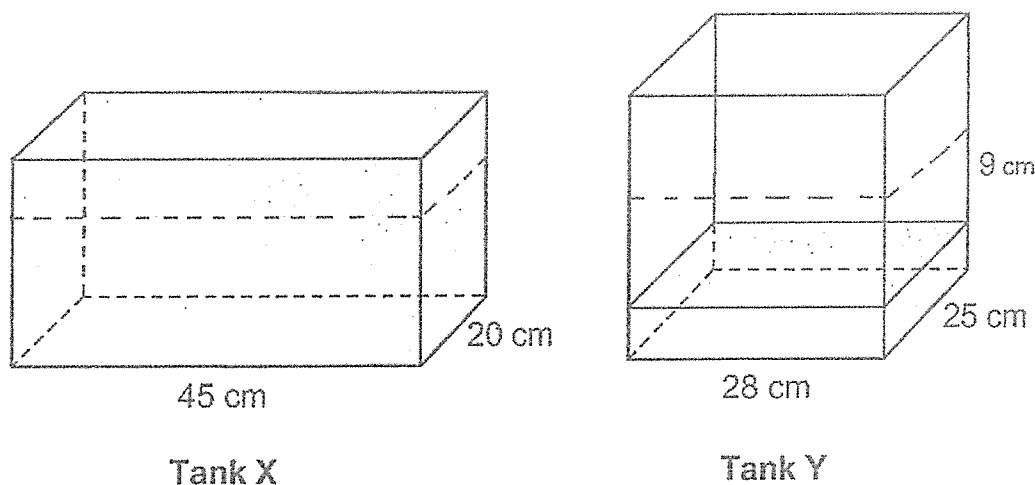
Ans: (a) _____ [2]

(b) There are 176 cookies in 2 large tins and 3 small tins. How many cookies did Mrs Menon bake?

Ans: (b) _____ [3]



14. The figure shows the amount of water in two rectangular tanks X and Y at first. Tank X was completely filled with water.



After $\frac{1}{3}$ of the water from tank X was poured into tank Y, the height of the water level in tank Y increased by 9 cm. The height of the water level in both tanks became the same.

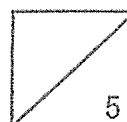
- (a) What was the height of the water level in tank X in the end?

Ans: (a) _____ cm [3]

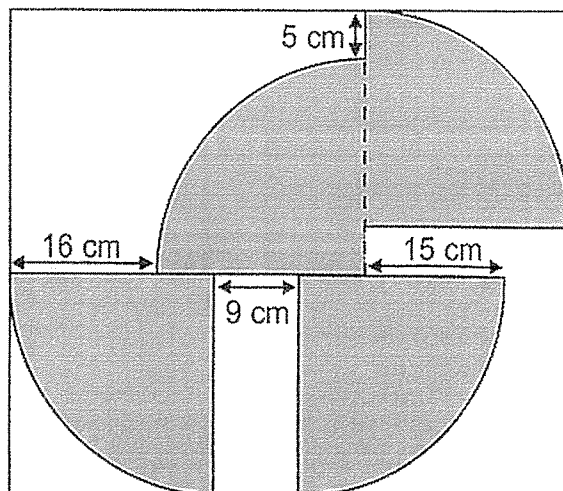
- (b) How many litres of water was in tank Y at first?

Ans: (b) _____ ℓ [2]

(Go on to the next page)



15. The shaded figure is formed by 4 identical quarter circles inside a rectangle.
(Take $\pi = 3.14$)



- (a) Find the radius of each quarter circle.

Ans: (a) _____ cm [1]

- (b) Find the perimeter of the shaded figure.

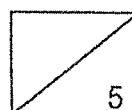
Ans: (b) _____ cm [2]

- (c) Find the unshaded area of the rectangle.

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

End of Paper

Page 14 of 14



YEAR : 2026
 LEVEL : PRIMARY 6
 SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
 SUBJECT : MATHEMATICS
 TERM : PRELIMINARY EXAMINATION

(BOOKLET A)

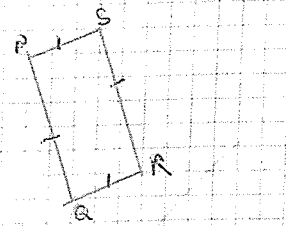
Q1	2	Q2	1	Q3	3	Q4	3	Q5	4
Q6	4	Q7	3	Q8	4	Q9	3	Q10	1
Q11	3	Q12	2	Q13	2	Q14	2	Q15	2
Q16	3	Q17	4	Q18	4				

(BOOKLET B)

Q19	$(a) 10 - 2 \times 4 = 10 - 8 = 2$ $(b) 2525 \div 5 = 505$ Answer: (a) 2 (b) 505	Q20	$(a) 10.53 - 6.89 = 3.64$ $(b) 0.745 \times 60 = 44.7$ Answer: (a) 3.64 (b) 44.7
Q21	$(a) \frac{1}{3} + \frac{1}{2} = \frac{2}{6} + \frac{3}{6} = \frac{5}{6}$ $(b) \frac{2}{7} \div 4 = \frac{2}{7} \times \frac{1}{4} = \frac{1}{14}$ Answer: (a) $\frac{5}{6}$ (b) $\frac{1}{14}$	Q22	$(a) 90 \text{ g} = 0.09 \text{ kg}$ $6 + 0.09 = 6.09 \text{ kg}$ $(b) 20.8 \div 4 = 5.2 \text{ kg}$ Answer: (a) 6.09 kg (b) 5.2 kg
Q23	$12 \times 85 = 1020 \text{ cm}$ $13.04 \text{ m} = 1304 \text{ cm}$ $1304 - 1020 = 284 \text{ cm}$ $284 \text{ cm} = 2 \text{ m } 84 \text{ cm}$ Answer: 2 m 84 cm	Q24	$\angle \text{SRY} = 38^\circ$ $\angle \text{SYR} = 180^\circ - 55^\circ - 38^\circ = 87^\circ$ $\angle \text{PYS} = 180^\circ - 87^\circ = 93^\circ$ Answer: 93°
Q25	$(a) 25p + 12 - 5p - 8$ $= 20p + 4$ $(b) 7(6) - \frac{4(6)}{3} = 42 - 8 = 34$ Answer: (a) $20p + 4$ (b) 34	Q26	(a) A and D fold to form triangular prisms. (b) Maximum number that can remain = 17 $23 - 17 = 6$ Answer: (a) A and D (b) 6 cubes
Q27	Total score = $16 \times 4 = 64$ Missing score = $64 - 18 - 12 - 13 = 21$ Answer: 21	Q28	Girls – boys = $5 - 1 = 4$ units 1 unit = $160 \div 4 = 40$ Children = $6 \times 40 = 240$ Adults = $240 \div 3 \times 4 = 320$ Answer: 320 adults

Q29	$A + B + C = 40 + 30 + 80 = 150 \text{ cm} = \frac{3}{5}$ of total Total = $150 \div 3 \times 5 = 250 \text{ cm}$ Answer: 250 cm	Q30	Area of two triangles = $2 \times \frac{1}{2} \times 20 \times 13 = 260 \text{ cm}^2$ Both unshaded parts = $260 - 172 = 88 \text{ cm}^2$ One unshaded part = $88 \div 2 = 44 \text{ cm}^2$ Answer: 44 cm ²
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PAPER 2

Q1	(a) $8 \times 9 = 72$ and $8 \times 10 = 80$ Largest multiple below 75 = 72 (b) Common factors of 24 and 9: 1, 3 Answer: (a) 72 (b) 1, 3	Q2	(a) 40% is given, but the total number of students is not given. (b) The mango sector is 90° : $\frac{90}{360} = \frac{1}{4} = 25\%$. Answer: (a) Not possible to tell (b) True
Q3	1 hour = 60 minutes $250 \times 60 = 15\,000 \text{ mL} = 15 \text{ L}$ $45 - 15 = 30 \text{ L}$ Answer: 30 L	Q4	
Q5	Z is $\frac{1}{2}$ of the square, so $CD = DE = 18 \text{ cm}$. $CE = 18 + 18 = 36 \text{ cm}$ $AB : BC = 1 : 2$, so $BC = 36 \div 3 \times 2 = 24 \text{ cm}$ Area of Y = $24 \times 18 = 432 \text{ cm}^2$ Answer: 432 cm ²	Q6	Handbag = $\$4w + \20 Scarf = $\$4w - \9 Total = $\$8w + \11 (a) Each person pays $\$ \frac{8w + 11}{5}$ (b) $\$ \frac{8(13) + 11}{5} = \23 Answer: (a) $\$ \frac{8w + 11}{5}$ (b) \$23
Q7	January = $960 \div 160 \times 100 = 600$ March = $960 \times 75\% = 720$ Increase = $720 - 600 = 120$ Percentage increase = $\frac{120}{600} \times 100\% = 20\%$ Answer: 20%	Q8	Total player-minutes = $5 \times 144 = 720$ 4 players were on court at a time. Booking time = $720 \div 4 = 180$ minutes 180 minutes = 3 hours Answer: 3 hours

Q9	(a) $(39 + 34 + 50) \div 3 = 41$ kg (b) New average = $(123 + 55) \div 4 = 44.5$ kg 44.5 kg is greater than 41 kg, so it increases. (c) Left to right: A, D, E, C, Bala Answer: (a) 41 kg (b) Increase (c) A, D, E, C	Q10	(a) Tap A: $10 \div 4 = 2.5$ L per minute (b) Capacity shown at 8 minutes = 90 L (c) Water from A = $2.5 \times 8 = 20$ L Water from B = $90 - 20 = 70$ L Fraction from B = $\frac{70}{90} = \frac{7}{9}$ Answer: (a) 2.5 L per minute (b) 90 L (c) $\frac{7}{9}$
Q11	(a) $\angle ABE = 59^\circ$ $x = 180^\circ - 90^\circ - 59^\circ = 31^\circ$ (b) $\angle AED = 31^\circ + 59^\circ = 90^\circ$ AE = ED, so $\angle EAD = \angle ADE = 45^\circ$ $y = 180^\circ - 59^\circ - 45^\circ = 76^\circ$ Answer: (a) 31° (b) 76°	Q12	(a) $\angle EBC = 180^\circ - 100^\circ = 80^\circ$ $\angle ECB = 180^\circ - 80^\circ - 39^\circ = 61^\circ$ The diagonal of a rhombus bisects the vertex angle. $\angle EAC = 180^\circ - 2(61^\circ) = 58^\circ$ (b) $\angle FEH = 180^\circ - 58^\circ = 122^\circ$ (c) EFGH is a trapezium because FE is not parallel to GH. Answer: (a) 58° (b) 122° (c) Trapezium; FE is not parallel to GH
Q13	(a) Remaining after large tins = $\frac{2}{5}$ Given away = $\frac{3}{4} \times \frac{2}{5} = \frac{3}{10}$ (b) One large tin = $\frac{1}{10}$ of total One small tin = $\frac{1}{40}$ of total 2 large + 3 small = $\frac{2}{10} + \frac{3}{40} = \frac{11}{40}$ Total = $176 \times 40 \div 11 = 640$ Answer: (a) $\frac{3}{10}$ (b) 640 cookies	Q14	Transferred volume = $28 \times 25 \times 9 = 6300 \text{ cm}^3 = \frac{1}{3}$ of tank X Tank X total volume = $6300 \times 3 = 18\,900 \text{ cm}^3$ Initial height of X = $18\,900 \div (45 \times 20) = 21$ cm (a) Final height of X = $\frac{2}{3} \times 21 = 14$ cm (b) Initial height of Y = $14 - 9 = 5$ cm Initial volume of Y = $28 \times 25 \times 5 = 3500 \text{ cm}^3 = 3.5$ L Answer: (a) 14 cm (b) 3.5 L
Q15	(a) Radius = $16 + 15 - 9 = 22$ cm (b) Four quarter-circle arcs = $2 \times 3.14 \times 22 = 138.16$ cm Straight edges = $16 + 9 + 15 + 2(5) + 3(22) = 116$ cm Perimeter = $138.16 + 116 = 254.16$ cm (c) Rectangle length = $22 + 9 + 22 + (22 - 15) = 60$ cm Rectangle height = $22 + 22 + 5 = 49$ cm Rectangle area = $60 \times 49 = 2940 \text{ cm}^2$ Shaded area = $3.14 \times 22 \times 22 = 1519.76 \text{ cm}^2$ Unshaded area = $2940 - 1519.76 = 1420.24 \text{ cm}^2$ Answer: (a) 22 cm (b) 254.16 cm (c) 1420.24 cm^2		

3
END

