RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

2025 PRELIMINARY ASSESSMENT

MATHEMATICS
PAPER 1

Name : _____ ( )

Class : Primary 6 / _____ (Tr: _____)

Date : 18 August 2025

BOOKLET A

15 Questions
20 Marks
Duration of Paper 1 (Booklets A & B): 1 hour

Note:

1. **Do not open this Booklet until you are told to do so.**
2. **Read carefully the instructions given at the beginning of each part of the Booklet.**
3. **Do not waste time. If a question is difficult for you, go on to the next one.**
4. **Check your answers thoroughly and make sure you attempt every question.**
5. **In this booklet, you should have the following:**
   (a) Page 1 to Page 6
   (b) Questions 1 to 15
6. **You are not allowed to use a calculator for both booklets.**

Questions **1** to **5** carry 1 mark each. Questions **6** 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. (25 marks)

---

1 What is the value of the digit 3 in 30 245?

(1) 30

(2) 300

(3) 3000

(4) 30 000

2 Find the value of $24 - 18 \div (12 - 9) \times 2$

(1) 1

(2) 12

(3) 21

(4) 4

3 Which fraction is greater than $\frac{1}{3}$?

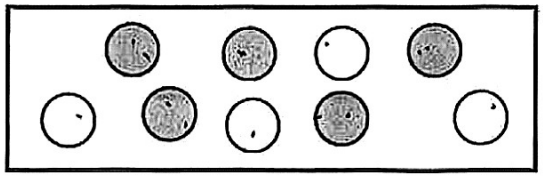
(1) $\frac{2}{5}$

(2) $\frac{2}{6}$

(3) $\frac{3}{10}$

(4) $\frac{3}{11}$

4 What fraction of the circles are shaded?



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

(2) $\frac{4}{5}$

(3) $\frac{4}{9}$

(4) $\frac{5}{9}$

5 $550 + \frac{5}{10} + \frac{5}{100} =$ _____

(1) 555.5

(2) 550.55

(3) 550.055

(4) 550.505

6 The ratio of the number of apples to the number of oranges in a basket is 3 : 5. The basket contains 15 apples. How many oranges are there?

(1) 40

(2) 25

(3) 24

(4) 9

7 Simplify $5y + 10 - 4y - 6$

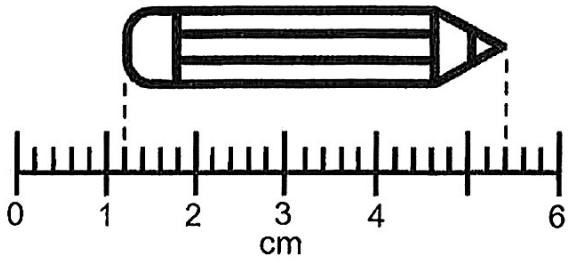
(1) $y + 4$

(2) $y + 16$

(3) $9y + 4$

(4) $9y + 16$

8 What is the length of the pencil?



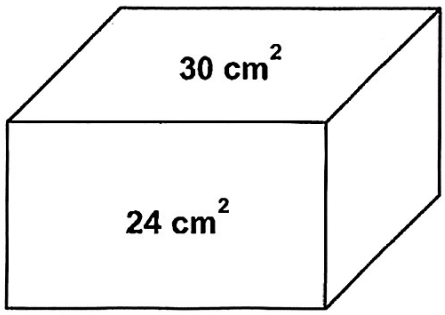
(1) 4.1 cm

(2) 4.2 cm

(3) 5.1 cm

(4) 5.2 cm

9 The figure shows a cuboid where the length, breadth and height are all whole numbers. The areas of two faces are given below.



What is the volume of the cuboid?

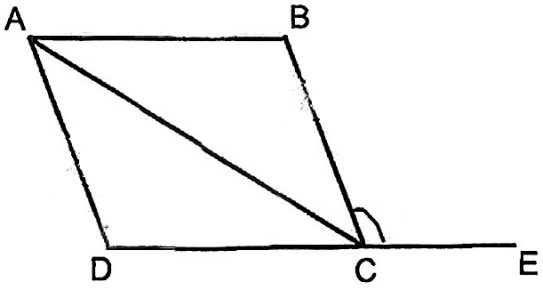
(1) 720 cm^3

(2) 180 cm^3

(3) 144 cm^3

(4) 120 cm^3

10 The figure below shows a rhombus ABCD and ECD is a straight line.



Which of the following is **false**?

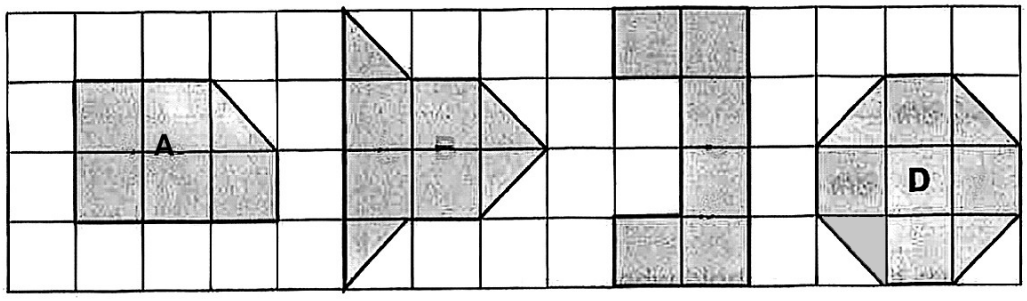
(1) $\angle BAC = \angle DAC$

(2) $\angle ABC = \angle BCE$

(3) $\angle ADC + \angle BCE = 180^\circ$

(4) $\angle DCA + \angle BAC + \angle BCE = 180^\circ$

11 Study the shapes shown in the grid.



Which two shapes have the same area?

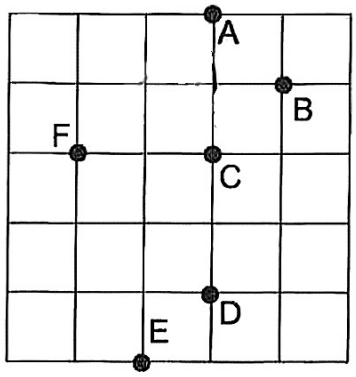
(1) A and B

(2) B and C

(3) B and D

(4) C and D

12 The square grid shows the position of A, B, C, D, E and F.



Cathy stood at one of the points facing point F. After she turned 45° anti-clockwise, she faced point C. Which point was Cathy at?

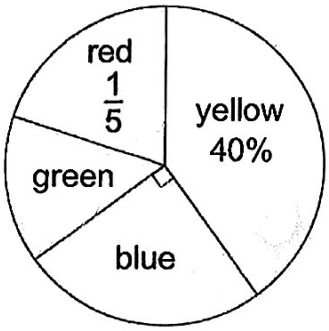
(1) A

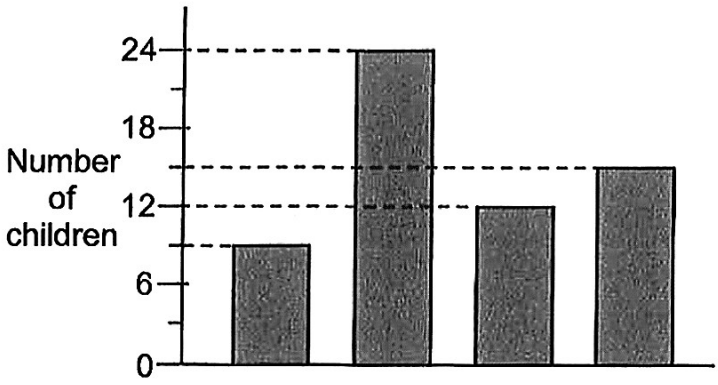
(2) B

(3) D

(4) E

13 The students in Art Club were asked to choose their favourite colour. The pie chart represents the students' choices. The students' choices were also represented by a bar graph, but the names of the colours were not shown.





What was the total number of students who chose green and blue as their favourite colour?

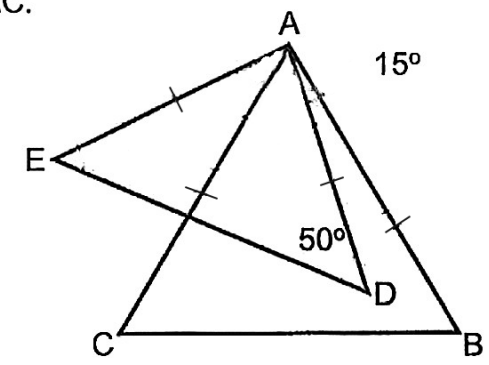
(1) 33

(2) 27

(3) 24

(4) 21

14 In the figure below, ABC is an equilateral triangle and ADE is an isosceles triangle. Find ∠EAC.



(1) 35°

(2) 40°

(3) 45°

(4) 75°

15 Jane had a sum of money that could buy exactly 5 large balloons, 25 medium balloons or 125 small balloons. She bought 2 large balloons, some medium balloons and 15 small balloons with the sum of money. What was the greatest number of medium balloons Jane could buy?

(1) 12

(2) 23

(3) 110

(4) 138

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MATHEMATICS
PAPER 1

Name : _____ ( )

Class : Primary 6 / _____ (Tr: _____)

Date : 18 August 2025

BOOKLET B

15 Questions
25 Marks

In this booklet, you should have the following:
(a) Page 7 to Page 13
(b) Questions 16 to 30

MARKS

	OBTAINED	POSSIBLE
BOOKLET A		20
BOOKLET B		25
TOTAL		45

Parent's Signature : _____

Questions **16** to **20** carry 1 marks each. Show your working clearly and write your answers in the space provided. For questions which require units, give your answers in the units stated.

(5 marks)

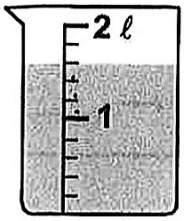
---

16 Find the value of 1944 ÷ 6

Ans: _____

---

17 How much water (in ml) is in the container?



Ans: _____ml

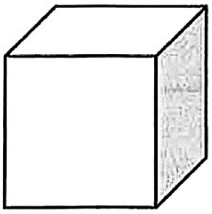
---

18 What is 8% of 400?

Ans: _____

3

19 What is the volume of the cube shown below?

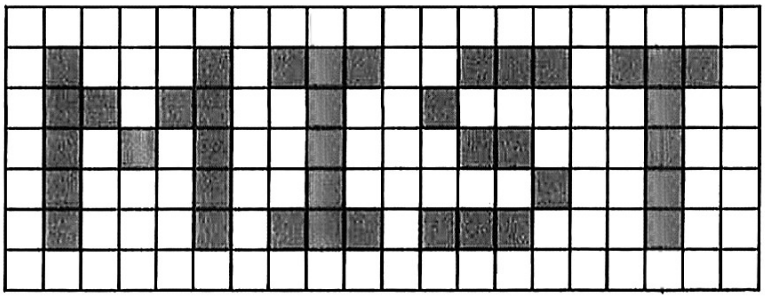


7 cm

Ans: _____ cm^3

---

20 Four letters are shown on a square grid.



Which letter(s) is/are symmetrical?

Ans: _____

2

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

(20 marks)

---

21 (a) Find the value of $\frac{3}{4} + \frac{1}{6}$

Ans: a) _____

(b) Find the value of $12 \div \frac{2}{5}$

Ans: b) _____

---

22 (a) Find the value of 12.3 – 7.72

Ans: a) _____

(b) Find the value of 5 ÷ 8. Express your answer in decimal.

Ans: b) _____

4

23 (a) Write down all the common factors of 24 and 64.

Ans: a) _____

(b) Write down all the common multiples of 6 and 8 smaller than 50.

Ans: b) _____

---

24 Cindy had 2.04 kg of sugar at first. She used 150 g to make some cakes. How many kilograms of sugar is left?

Ans: _____kg

4

25 A packet of stickers was shared among three friends. Susan received $8p$ stickers and John received half as many stickers as Susan. John received 5 more stickers than Ahmad.

(a) How many stickers did Ahmad receive? Give your answer in terms of p.

Ans: a) _____

(b) How many stickers did the three friends receive altogether when $p = 4$?

Ans: b) _____

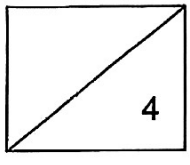
---

26 All the books in a class library were borrowed by a group of 20 students. Each student borrowed either 2 or 3 books. The number of each type of book borrowed from the library by the students is shown in the table below.

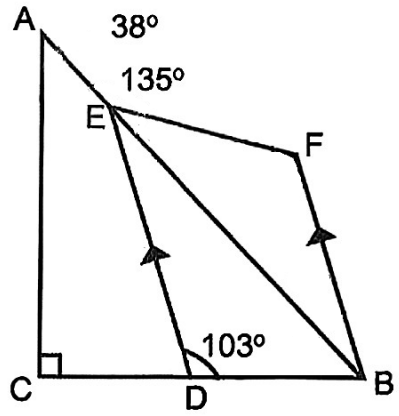
Type of books	Number of books borrowed
Horror	12
Science	8
Adventure	20
Mystery	15

How many students borrowed only 2 books?

Ans: _____



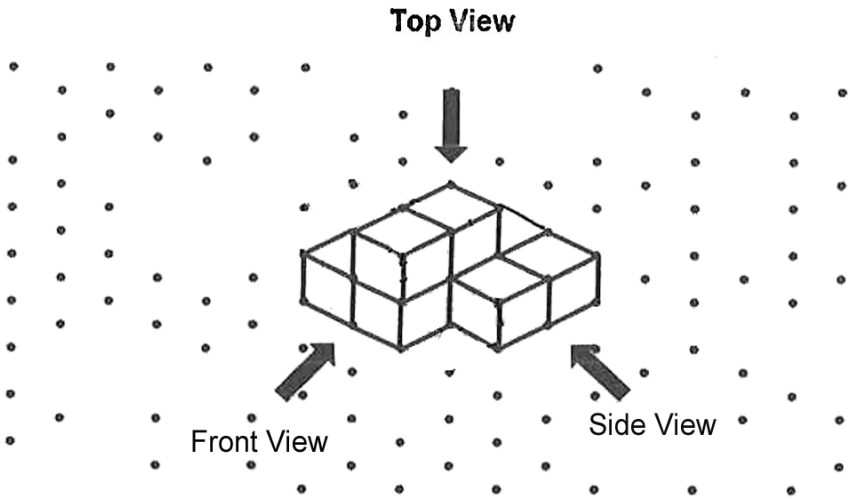
27 In the figure below, ABC is a right-angled triangle and BDEF is a trapezium. Find ∠BFE.



Ans: _____°

---

28 Mr Tan stacked 7 cubes to form the solid below.



(a) Mr Tan painted the whole solid, including the base. How many of the 7 cubes had exactly four faces painted?

Ans: a) _____

(b) What was the maximum number of cubes Mr Tan could add to the solid so that the front view is the same as the side view as shown above?

Ans: b) _____

4

29 The average price of a set of books is $12. When one more book which cost $42 is added into the set of books, the average price of the books became $18. How many books are there at first?

Ans: _____

---

30 Miss Wong had a box of red and blue stars. $\frac{3}{4}$ of the total number of stars were red. Miss Wong used $\frac{3}{5}$ of the number of red stars and some blue stars to decorate a gift. She used $\frac{1}{2}$ of the total number of stars to decorate the gift. What fraction of the number of blue stars did she use to decorate the gift?

Ans: _____

4

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2025 PRELIMINARY ASSESSMENT

MATHEMATICS
PAPER 2

Name : _____ ( )

Class : Primary 6 / _____ (Tr: _____)

Date : 18 August 2025

17 Questions
55 Marks
Duration of Paper 2: 1 hour 30 minutes

Note:
1. **Do not open this Booklet until you are told to do so.**
2. **Read carefully the instructions given at the beginning of each part of the Booklet.**
3. **Do not waste time. If a question is difficult for you, go on to the next one.**
4. **Check your answers thoroughly and make sure you attempt every question.**
5. **In this paper, you should have the following:**
   (a) Page 1 to Page 15
   (b) Questions 1 to 17
6. **You are allowed to use a calculator.**

MARKS

	OBTAINED	POSSIBLE
PAPER 1		45
PAPER 2		55
TOTAL		100

Parent's Signature : _____

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

(10 marks)

---

1 Mrs Chia bought an iron and a kettle for $279.30. The kettle cost $39.70 less than the iron. How much did the iron cost?

Ans: $_____

---

2 According to his watch, John finished working on his project at 13 20. His watch was 15 min slow.

(a) What was the actual time John finished working on his project?

Ans: a)_____

(b) John spent 2 h 45 min working on his project. According to the actual time, what time did he start working on his project?

Ans: b) _____

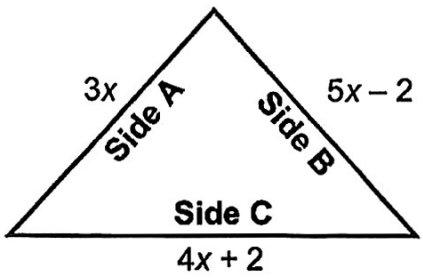
---

3 Tanvi took 10 min to walk the first 450 m. She increased her speed such that she took 10 min to walk the next 600 m. What was the Tanvi's average speed for the whole journey in km/h?

Ans: _____km/h

---

4 The figure below shows a triangle with its three sides given.

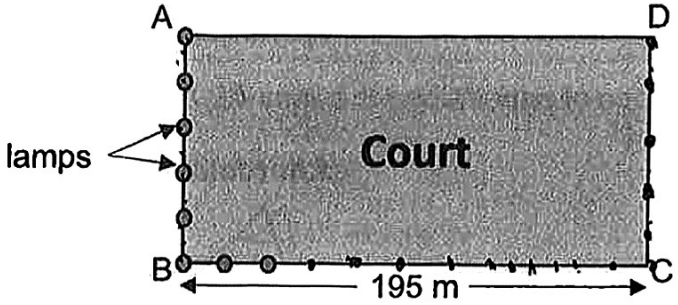


Each of the statements below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
a) The length of Side C is longer than the length of Side B.			
b) The perimeter of the triangle is $(12x + 4)$ units.			
c) The triangle is an equilateral triangle.			

4

5 A total of 24 lamps are set up at an equal distance along three sides, AB, BC and CD of a rectangular hardcourt. The figure below shows part of the set up. The length of the hardcourt is 195 m.



What is the breadth of the court?

Ans: _____ m

2

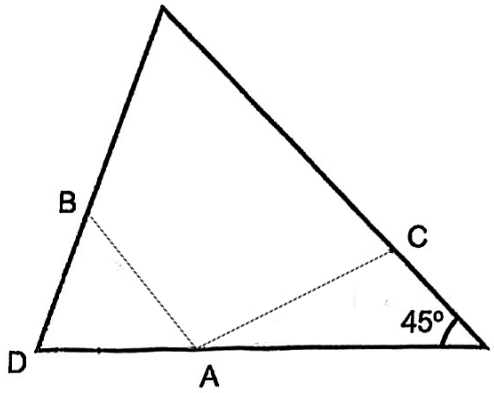
For questions **6** to **17**, show your working clearly and write your answers in the space provided.
The number of marks available is shown in brackets [ ] at the end of each question.

(45 marks)

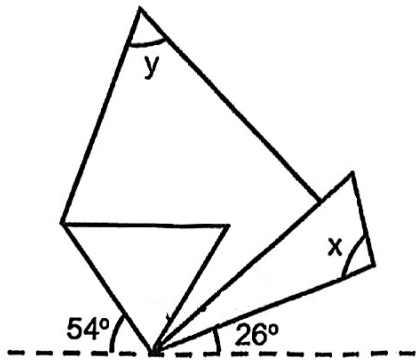
---

6 John folded a triangular piece of paper along the lines AB and AC and DB = DA.

Before folding



After folding



(a) Find ∠x.

Ans: a) _____ [1]

(b) Find ∠y.

Ans: b) _____ [2]

3

7 Black and white squares are used to form figures that follow a pattern. The first three figures are shown below.

Figure 1

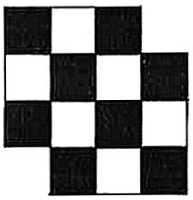


Figure 2

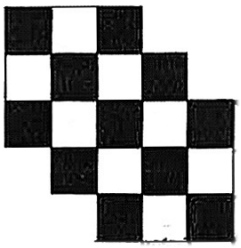


Figure 3

Figure Number	**1**	**2**	**3**
Black Squares	5	8	11
White Squares	4	6	8
Total Squares	**9**	**14**	**19**

(a) What is the difference in the number of black and white squares used for Figure 4?

Ans: a) _____ [1]

(b) Another figure in the pattern had 20 more black than white squares. What is the total number of black and white squares in that figure?

Ans: b) _____ [2]

3

8 Water leaked from two different taps at a constant rate, into two identical buckets. Tap A took 50 minutes to completely fill the bucket, while Tap B took 80 minutes to completely fill the bucket. The tap with the faster rate leaked 30 ml more water per minute than the slower one.

(a) Which tap, A or B, leaked water at a faster rate?

Ans: a) _____ [1]

(b) What was the capacity of each bucket in litres?

Ans: b) _____ [2]

3

9 Jeremy was given the same amount of money each month. In January, he spent $30 and saved the rest. In February, he spent 30% less than in January and saved the remaining $27.

(a) How much did Jeremy spend in February?

Ans: a) _____ [2]

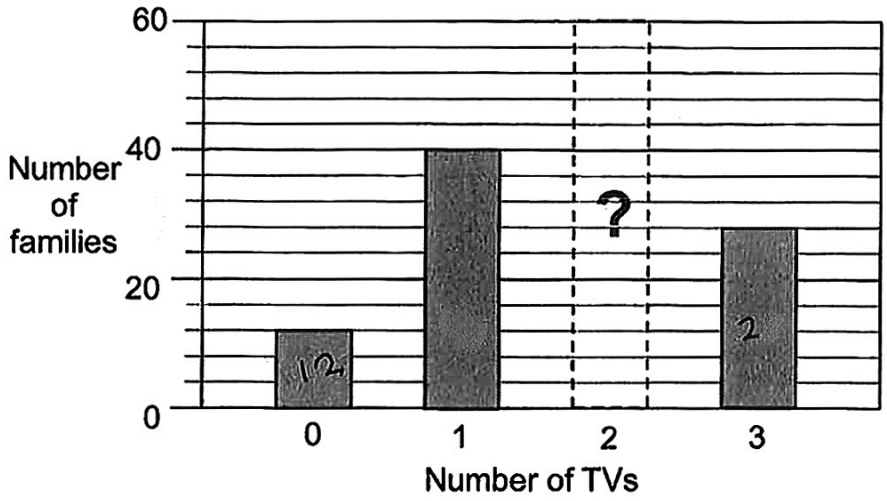
(b) What was the percentage increase in the amount Jeremy saved in February?

Ans: b) _____ [2]

4

10 The bar graph shows the number of television sets some families have in their home. The number of families with 2 television sets is missing in the graph

$\frac{1}{3}$ of the families have 2 television sets in their home.



(a) How many families have only 2 television sets in their home?

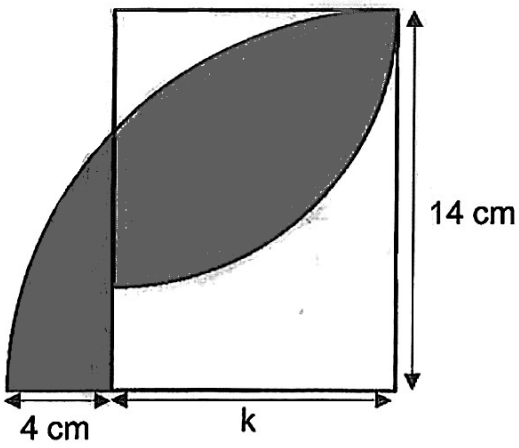
Ans: a) _____ [2]

(b) What is the average number of television sets each family have in their home?

Ans: b) _____ [2]

4

11 The figure below is made up of 2 quarter-circles and a rectangle overlapping one another. The length of the rectangle is 14 cm. Take $\pi = 3.14$.



(a) Find the missing length k.

Ans: a)_____ [1]

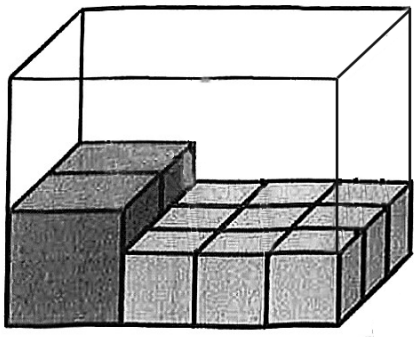
(b) Find the area of the shaded figure.

Ans: b)_____ [3]

4

12 Joanna has 4 identical large cubes and some identical small cubes. She packs all the cubes tightly into a rectangular container such that the cubes of the same size are stacked on top of each other. The box was filled to the brim exactly.

The figure below shows the first layer of cubes packed in the box.



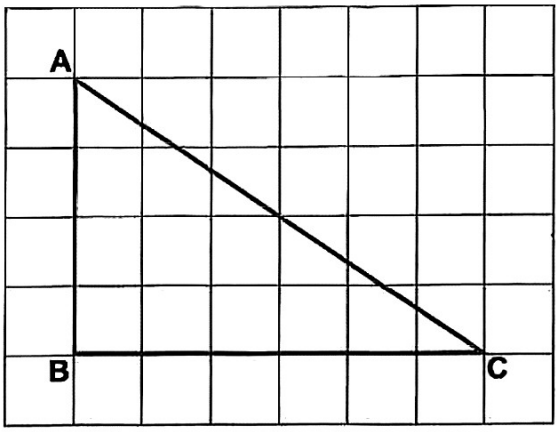
(a) How many small cubes does Joanna have?

Ans: a) _____ [1]

(b) The length of a small cube is 4 cm. Find the volume of the rectangular container.

Ans: b) _____ [3]

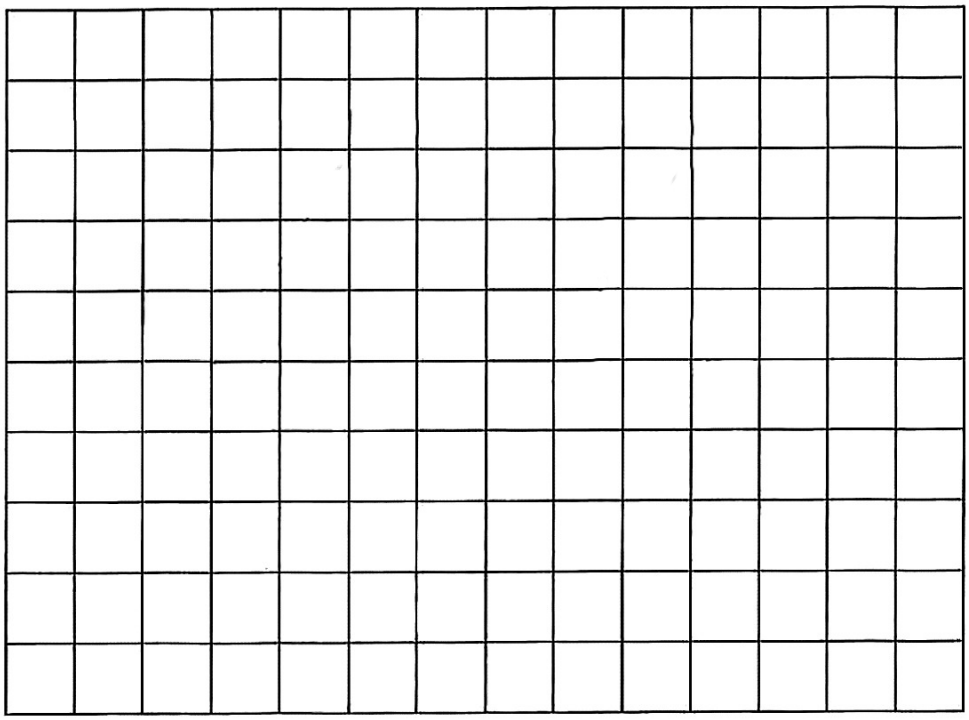
13 The figure below shows a right-angled triangle ABC drawn on a square grid.



(a) Using a protractor, measure ∠ACB.

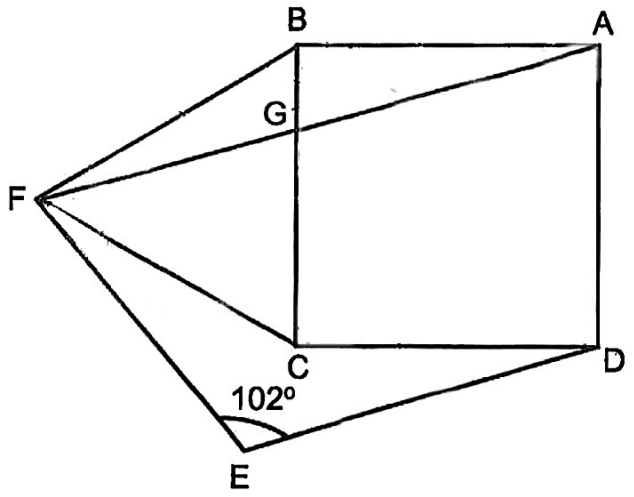
Ans: a) _____ [1]

(b) Draw a parallelogram WXYZ on the square grid below. Parallelogram WXYZ has the same perimeter as Triangle ABC. [2]



3

14 In the figure below, ABCD is a square, BCF is an equilateral triangle and ADEF is a trapezium. AGF is a straight line and ∠DEF = 102°.



(a) Find ∠AGC.

Ans: a) _____ [2]

(b) Find ∠CFE.

Ans: b) _____ [2]

15 A fruit stall has a total of 1425 apples and pears. After selling 40% of the apples and 225 pears in the morning, the ratio of the number of apples left to the number of pears left became 3 : 1.

(a) How many pears were left?

Ans: a) _____ [2]

(b) The fruit stall sold more apples in the afternoon such that the ratio of the number of apples left to the number of pears left became 3 : 2. How many apples did the fruit stall sell in the afternoon?

Ans: b) _____ [2]

4

16 Wei Li used $\frac{1}{4}$ of her pocket money to buy 3 pens and 7 erasers. The cost of each pen was three times the cost of each eraser. Wei Li bought some more erasers with $\frac{5}{6}$ of her remaining pocket money. She spent $36.10 more buying the erasers than the pens.

(a) How many erasers could Wei Li buy with the amount of money for 3 pens?

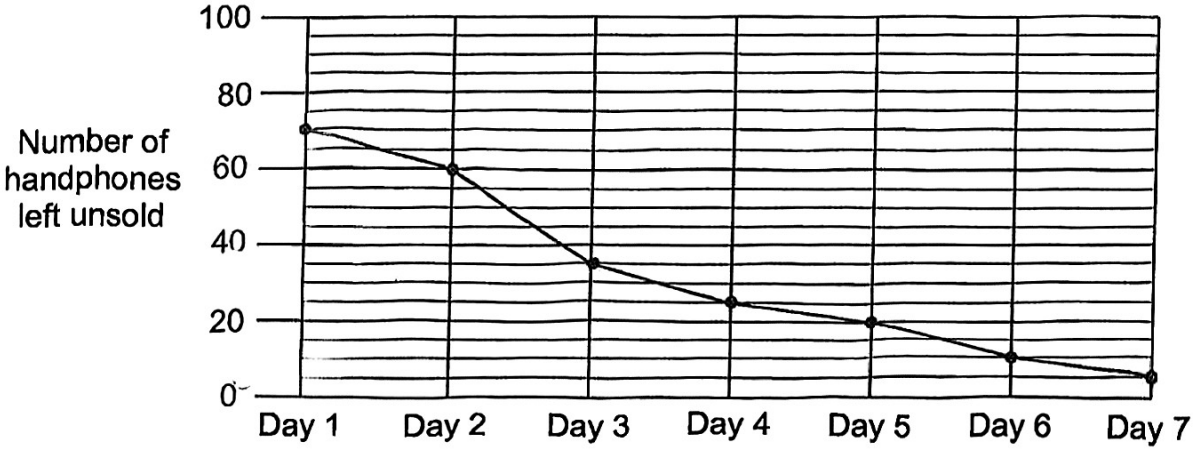
Ans: a) _____ [1]

(b) What was the cost of one eraser?

Ans: b) _____ [3]

4

17 A company offered 100 handphones at a 25% discount during a 7-day sale. The line graph shows the number of handphones left unsold at the end of the day.



(a) On which day was the most number of handphones sold?

Ans: a) _____ [1]

(b) What fraction of the total number of handphones were sold in the first 4 days of the sale?

Ans: b) _____ [1]

(c) After the sale, the remaining handphones were sold without discount. The shop collected $32 330 from selling the 100 handphones. How much was the price of each handphones before the discount?

Ans: c) _____ [3]

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SCHOOL : RED SWASTIKA SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATHS
TERM : P6 PRELIM

Paper 1 Booklet A

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

Paper 1 Booklet B

Q16	324
Q17	1.6 ℓ = 1600ml
Q18	$\frac{8}{100} x \frac{400}{1}$ = 32
Q19	7 x 7 x 7 = 49 x 7 = 343 cm³
Q20	3
Q21(a)	$\frac{3}{4} + \frac{1}{6} = \frac{9}{12} + \frac{2}{12} = \frac{11}{12}$
Q21 (b)	$12 \div \frac{2}{5} = \frac{12}{1} x \frac{5}{2} = 30$
Q22(a)	4.58
Q22(b)	0.625
Q23(a)	24 = 1 x 24 = 2 x 12 = 3 x 8 = 4 x 6 64 = 1 x 64 = 2 x 32 = 4 x 16 = 8 x 8 Ans: 1 , 2 , 4 ,8
Q23(b)	6 12 18 24 30 36 42 48 8 16 24 32 40 48 Ans: 24 , 48

Q24	2.04 kg = 2040g Left = 2040 – 150 = 1890 1890g = 1.89 kg
Q25(a)	S : J : A 8p : 4p : 4p -5 Ans: (4p – 5)
Q25(b)	8p + 4p + 4p – 5 = 16p – 5 = 4 x 16 -5 = 64 – 5 = 59
Q26	5
Q27	$\angle A = 180° - 90° - 38°$ $= 52°$ $\angle B = 180° - 103° - 52°$ $= 25°$ $\angle C = 180° - 135°$ $= 45°$ $\angle BFE = 180° - (25° + 45°)$ $= 110°$
Q28(a)	3
Q28(b)	6
Q29	42 – 18 = 24 $\frac{24}{6} = 4$
Q30	$\frac{1}{5}$

SCHOOL : RED SWASTIKA SCHOOL
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Paper 2

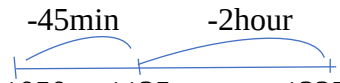
Q1

Iron = 1u
Kettle = 1u – 39.70
2u = 279.30 + 39.70
= 319
1u = $\frac{319}{2}$ = **$ 159.50**

Q2(a)

1320 + 15mins = 1335

Q2(b)



Ans: 10.50am

Q3

Average = 0.45 + 0.6 / $\frac{1}{3}$
= 3.15 km/h

Q4

If X is 2 , B = 2 x 5 -2 = 8
C = 2 x 4 + 2 = 10

If X is 4 , B = 4 x 5 -2 = 18
C = 4 x 4 + 2 = 18

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

Statement	True	False	Not possible to tell
a) The length of Side C is longer than the length of Side B.			✓
b) The perimeter of the triangle is $(12x + 4)$ units.		✓	
c) The triangle is an equilateral triangle.		✓	

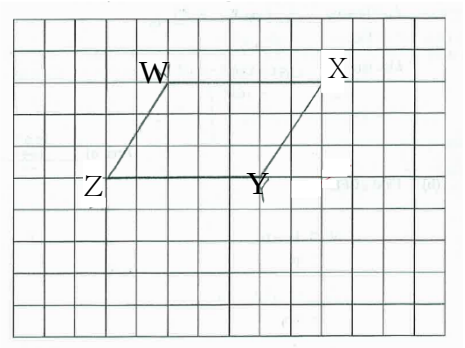
Q5

BC = 24 – 5 – 5 = 14

Distance = 195 ÷ 13
= 15

Breadth = 15 x 5 = 75m

Q6(a)	$\angle x = 180° - 45° - 26° = 109°$
Q6(b)	$\angle A = 180° - 54° - 54° = 72°$ $\angle y = 180° - 45° - 72° = 63°$
Q7(a)	Black 4 = 11 + 3 = 14 White 4 = 8 + 2 = 10 Difference = 14 – 10 = 4
Q7(b)	Black 20 = 5 + 3 x (20-1) = 62 White 20 = 4 + 2 x (20-1) = 42 Total = 42 + 62 = 104
Q8 (a)	A
Q8 (b)	Tap A 1 min = $\frac{1}{50}\ bucket = \frac{8}{400}$ Tap B 1 min = $\frac{1}{80}\ bucket = \frac{5}{400}$ 30ml → $\frac{3}{400}$ $\frac{400}{400} \rightarrow \frac{30}{3}\ x\ 400$ = 4000ml = 4ℓ
Q9 (a)	Feb Spent = $\frac{30}{100} x\ 70$ = $ 21
Q9 (b)	Save Jan = 48 – 30 = $18 Increase = 27 – 18 = $ 9 % Increase = $\frac{9}{18} x\ 100\% = 50\%$
Q10(a)	$\frac{2}{3} = 12 + 40 + 28 = 86$ $\frac{1}{3} = \frac{80}{2} = 40$
Q10(b)	Average = $\frac{(12x0+40x1+40x2+28x3)}{12+40+40+28}$ = 1.7
Q11(a)	K = 14 – 4 = 10cm
Q11(b)	$\frac{1}{4}\ \pi r^2 = \frac{1}{4}\ x\ 3.14\ x\ 10\ x\ 10 = 78.5$ $\frac{1}{4}\ \pi r^2 = \frac{1}{4}\ x\ 3.14\ x\ 14\ x\ 14 = 153.86$ Shaded = 78.5 + 153.86 – 140 = 92.36 cm²

Q12(a)	Small cube = 9 x 3 = 27
Q12(b)	H = 4 x 3 = 12 B = 4 x 3 = 12 L = 4 x 3 + 6 = 18 Volume = 18 x 12 x 12 = 2592 cm³
Q13(a)	34°
Q13(b)	
Q14(a)	$\angle A = 60° + 90° = 150°$ $\angle B = \frac{(180-150)}{2} = 15°$ $\angle C = 180° - 90° - 15° = 75°$ $\angle AGC = 180° - 75° = 105°$
Q14(b)	$\angle X = 60° - 15° = 45°$ $\angle CFE = 180° - 102° - 45° = 33°$
Q15(a)	Apples at First = $\frac{3}{60} x\ 100 = 5$ Pears = 1u + 225 6u = 1425 – 225 = 1200 1u = $\frac{1200}{6}$ $= 200$
Q15(b)	200 = 2u 3u = $\frac{200}{2}\ x\ 3$ $= 300$
Q16(a)	1p = 3e $\frac{1}{4} = 16e$ 3p = 9e $\frac{1}{4} = 3p + 7e$ Ans: 9 erasers

Q16(b)	3u = 16e 7.5u = $\frac{16}{3}$ x 7.5 = 40 \$36.10 = 47e – 3p \$36.10 = 47 – 9 = 38 e = $\frac{36.10}{38}$ = \$ 0.95
Q17(a)	1
Q17(b)	4days = 30 + 10 + 25 +10 = 75 Ans: $\frac{75}{100}$
Q17(c)	Sold : Unsold discount : no discount 95u : 5u 71.25 5u \$32330 → 71.25 + 5 = 76.25 1u = $\frac{32330}{76.25}$ = \$ **424**