

SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL ASSESSMENT 2013

PRIMARY 5

MATHEMATICS
PAPER 1

BOOKLET A

Name : _____ ()

Class : Primary 5

		Marks attained	Max Mark
Paper 1	Booklet A		20
	Booklet B		20
Paper 2			60
Total Marks			100

Parent's Signature

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

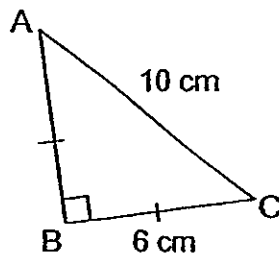
Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

You are not allowed to use a calculator

5. ABC is an isosceles triangle. What is the area of the triangle?



- (1) 18 cm^2
(2) 22 cm^2
(3) 30 cm^2
(4) 36 cm^2
6. Find the value of $9 - 2.5 + 4.9 \div 7$.
- (1) 6.57
(2) 7.20
(3) 13.50
(4) 16.25
7. Jack had 30 orange, 24 green and 21 yellow marbles. What percentage of his marbles was green?
- (1) 24%
(2) 28%
(3) 32%
(4) 40%

Booklet A

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). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (20 marks)

1. In 3 519 742, the value of the digit '1' is _____.

- (1) 1×1000
- (2) $1 \times 10\,000$
- (3) $1 \times 100\,000$
- (4) $1 \times 1\,000\,000$

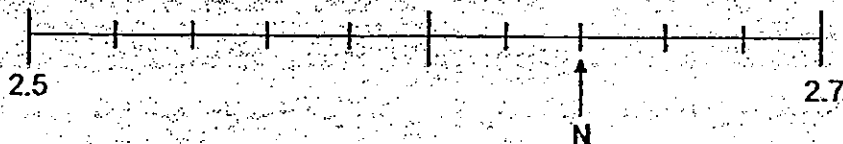
2. $9\ell\,2\,m\ell =$ _____

- (1) 9.2ℓ
- (2) 9.02ℓ
- (3) 9.002ℓ
- (4) 9.0002ℓ

3. How many ninths are there in $2\frac{2}{3}$?

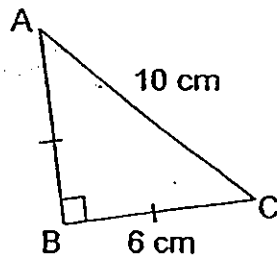
- (1) 12
- (2) 20
- (3) 21
- (4) 24

4. Study the following number line carefully. What is the value of N?



- (1) 2.552
- (2) 2.57
- (3) 2.602
- (4) 2.64

5. ABC is an isosceles triangle. What is the area of the triangle?



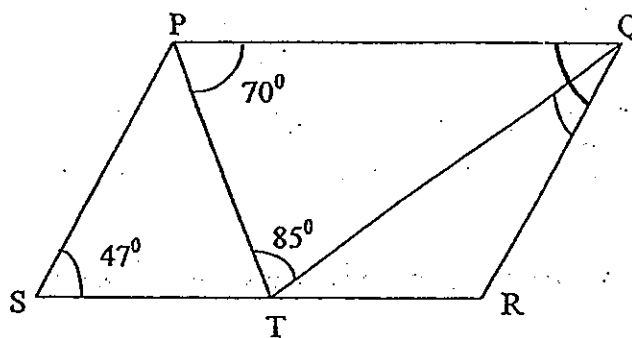
- (1) 18 cm^2
 - (2) 22 cm^2
 - (3) 30 cm^2
 - (4) 36 cm^2
6. Find the value of $9 - 2.5 + 4.9 \div 7$.
- (1) 6.57
 - (2) 7.20
 - (3) 13.50
 - (4) 16.25
7. Jack had 30 orange, 24 green and 21 yellow marbles. What percentage of his marbles was green?

- (1) 24%
- (2) 28%
- (3) 32%
- (4) 40%

8. $\frac{9}{10}$ of a pizza was shared among 3 children.
What fraction of the pizza did each child get?

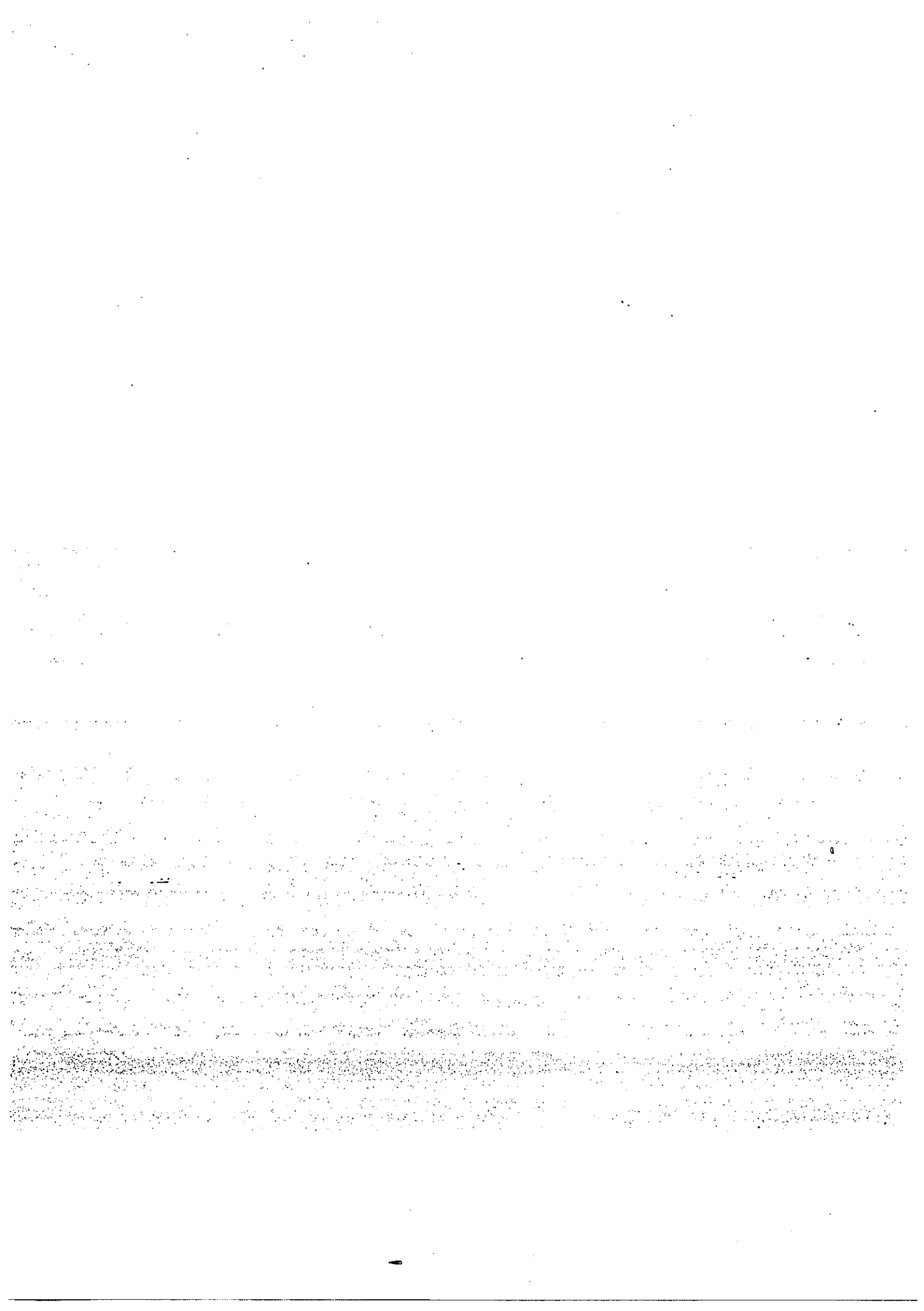
- (1) $\frac{3}{10}$
(2) $\frac{27}{10}$
(3) $1\frac{7}{30}$
(4) $2\frac{7}{10}$

9. In the figure below, not drawn to scale, PQRS is a parallelogram.
Find $\angle RQT$.



- (1) 22°
(2) 25°
(3) 47°
(4) 133°
10. Jilly is 15 years old now and her father is thrice as old. What was the ratio of Jilly's age to her father's age 5 years ago?

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



11. For every carton of fruits that Bob sold, he received \$2. He earned an extra bonus of \$10 for every 30 cartons sold. How many cartons of fruits did he sell if he received a total of \$80?

- (1) 25
- (2) 30
- (3) 35
- (4) 40

12. $\frac{3}{8}$ of the cups and $\frac{2}{5}$ of the plates were sold. Equal numbers of cups and plates were sold. What was the ratio of the number of cups to the number of plates at first?

- (1) 3 : 2
- (2) 8 : 5
- (3) 15 : 16
- (4) 16 : 15

13. The table below shows the standard taxi fares and charges.

Flag-down fee	\$3.20
Every 400m.	20 cents

How much should Billy pay for a journey of 8 km?

- (1) \$3.40
- (2) \$3.60
- (3) \$4.00
- (4) \$7.20

14. A bottle contained some water. Sam poured all the water from the bottle into an empty jug. The jug became $\frac{1}{15}$ full. The jug can contain 3 times as much water as the bottle. What fraction of the bottle was filled with water?

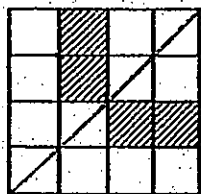
(1) $\frac{1}{45}$

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

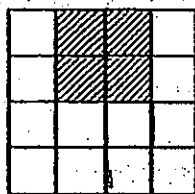
(3) $\frac{4}{15}$

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

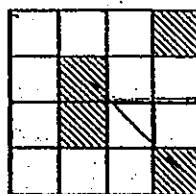
15. Each of the figures below is made up of 16 squares. Four squares in each figure are shaded. Which figure is **not** a symmetrical figure?



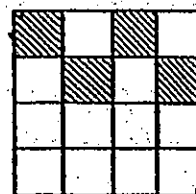
(1)



(2)



(3)



(4)

(1) 1

(2) 2

(3) 3

(4) 4

Booklet B

Name: _____ () Class: P5 SY / C / G / SE / P

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this column

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

16. Express $\frac{3}{8}$ as a decimal, correct to 2 decimal places.

Ans: _____

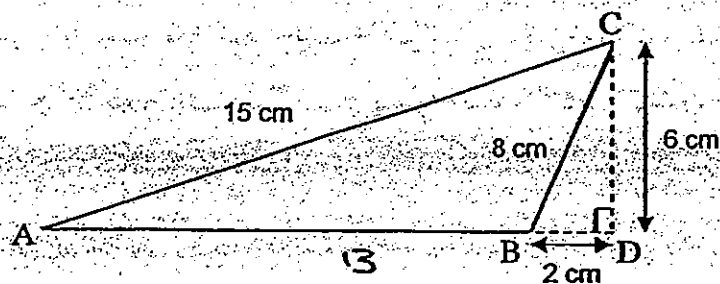
17. 4 km 5 m = _____ m

Ans: _____ m

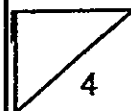
18. A TV set cost \$3600. There was an additional 7% of GST. How much was the GST?

Ans: \$ _____

19. In the figure below, not drawn to scale, the perimeter of triangle ABC = 37 cm.
Find the area of triangle ABC.



Ans: _____ cm²



20. There were 126 girls in a kindergarten. 58% of the pupils were boys. How many children were there in the kindergarten?

Ans: _____

21. Mandy had $\frac{7}{12}$ kg of flour. She used some of the flour to bake cookies and had $\frac{1}{5}$ of it left. How much flour did she use?

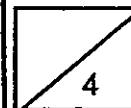
Ans: _____ kg

22. Ahmad had an equal number of \$2 and \$5 notes. The value of all the notes \$119. How many \$2 notes did he have?

Ans: _____

23. The ratio of the mass of Alice to Bob was 1: 5. The ratio of the mass of Bob to Cindy was 7: 2 Find the ratio of the mass of Alice to the mass of Bob to the mass of Cindy.

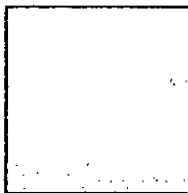
Ans: _____



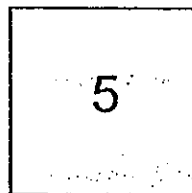
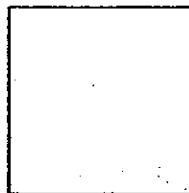
24. A triathlon was 36 km long. Tom had to swim $\frac{1}{4}$ of it, cycle $\frac{1}{6}$ of it and run the remainder of the race. How far did Tom run?

Ans: _____ km

25. Each of the 3 cards below is printed with a different whole number. They are arranged from the biggest to the smallest. When two numbers are multiplied together, the products are 200, 50 and 100 respectively. What is the biggest number?

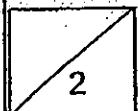


biggest



smallest.

Ans: _____



Questions 26 to 30 carry 2 marks each. Show your working clearly in the space for each question and write your answers in the spaces provided.
For questions which require units, give your answers in the units stated. (10 marks)

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this column

26. Andy had \$28 more than Jordan. After Jordan had spent \$26, Andy had 4 times as much as Jordan. How much did Jordan have at first?

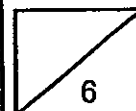
Ans: \$ _____

27. The ratio of the number of Sally's stickers to the number of Jane's stickers was 1 : 3. After Jane had given 28 of her stickers to Sally, the ratio became 3 : 2. How many stickers did Sally have in the end?

Ans: _____

28. In a club, the ratio of the number of boys to girls was 2 : 5. After 21 boys and 21 girls had joined the club, the ratio of boys to girls became 3 : 4. How many girls were there in the club in the end?

Ans: _____



29. A packet of candies cost \$4 and a bar of chocolate cost \$6. Mrs Tan bought some packets of candies and bars of chocolates in the ratio 3:2. She paid \$48 in total. How many bars of chocolates did she buy?

Ans: _____

- 30 Peter lost 50 of his marbles in the first game. He lost $\frac{3}{4}$ of the remaining marbles in the second game. He was then left with $\frac{1}{5}$ of the original number of marbles. How many marbles did Peter have at first?

Ans: _____

End of Paper 1

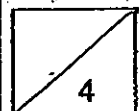


Lionel, Mike, Nathan and Pat participated in a contest. Mike scored the least number of points in the contest. Lionel scored more points than Mike but fewer points than Nathan. Pat scored fewer points than Lionel but more than Mike. Who scored the most points in the contest?

Ans: _____

5. Rose bushes were planted along each side of a square plot of land so that an equal number of bushes were found along each side of the square plot. If there were 32 rose bushes planted, how many rose bushes were there along each side of the square plot of land?

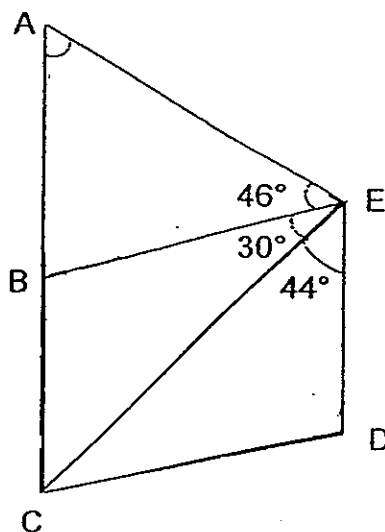
Ans:



Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the space provided. For questions which require units, give your answers in the units stated. (10 marks)

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1. The diagram below is not drawn to scale. Find $\angle BAE$.

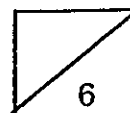


Ans: _____°

2. At a sale, a pot and a frying pan cost \$105.90. The frying pan cost \$50.50 more than the pot. If the usual price of the pot was \$80, how much did she save on the pot?

3. Peter had some money. Molly had $\frac{1}{3}$ as much as Peter. Rita had 5 times as much as Molly. Rita and Molly had \$600. How much did Peter have?

Ans: \$ _____

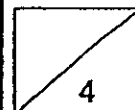


4. Lionel, Mike, Nathan and Pat participated in a contest. Mike scored the least number of points in the contest. Lionel scored more points than Mike but fewer points than Nathan. Pat scored fewer points than Lionel but more than Mike. Who scored the most points in the contest?

Ans: _____

5. Rose bushes were planted along each side of a square plot of land so that an equal number of bushes were found along each side of the square plot. If there were 32 rose bushes planted, how many rose bushes were there along each side of the square plot of land?

Ans: _____



For questions 6 to 18, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [] at the end of each question or part-question. (50 marks)

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this column

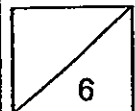
6. The average savings of Cindy and Dan was \$2500. The average savings of Eden and Cindy was \$3000. If the ratio of Dan's to Eden's savings was 9 : 11, find Dan's savings.

Ans: _____ [3]

7. Mr Lim had 90 pieces of 20-cent, 50-cent and \$1 coins.

$\frac{1}{5}$ of them were 50-cent coins, $\frac{1}{2}$ of the remaining coins were 20-cent coins and the rest were \$1 coins. How much money did Mr Lim have in all?

Ans: _____ [3]

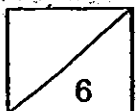


8. A bag cost as much as a T-shirt. Five T-shirts and 4 caps cost \$31. Four caps and 3 bags cost \$25. How much did 1 bag cost?

Ans: _____ [3]

9. Diana spent $\frac{1}{3}$ of her money on ribbons and $\frac{3}{5}$ of the remainder on 4 boxes. One box cost \$3. How much money did she have at first?

_____ [3]

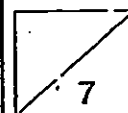


10. The number of pupils in Group A was 4 more than the pupils in Group B. After a test was given, 72 pupils graduated from Group A to Group B. The number of pupils in Group B became thrice as many as those in Group A. How many pupils were there in Group A at first?

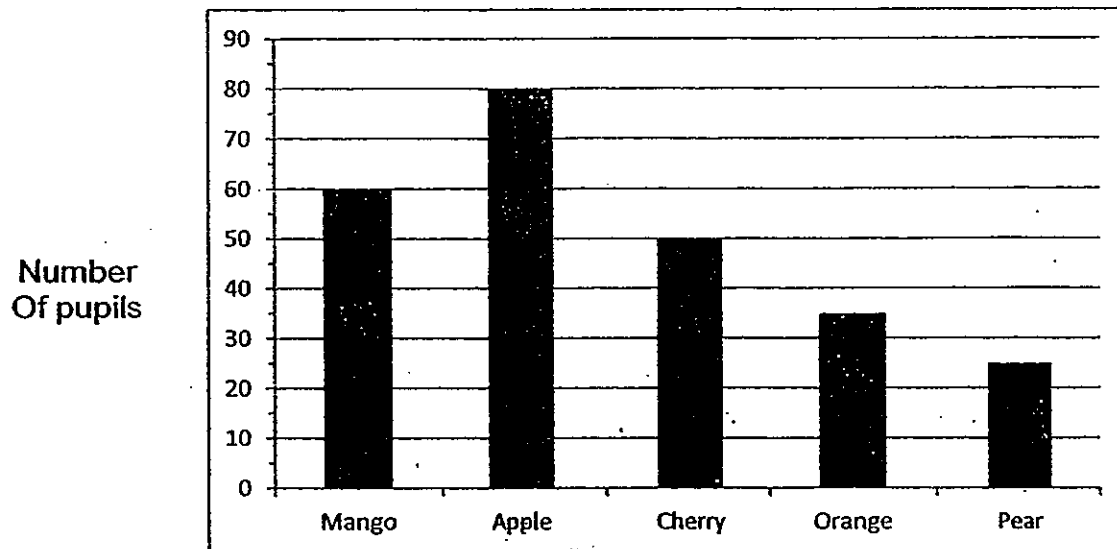
Ans: _____ [3]

11. Carl, Don and Ed sold donuts at a funfair. Carl sold $\frac{1}{7}$ of the total number of donuts. Don sold $\frac{5}{12}$ of the remaining donuts and Ed sold the rest. Carl sold 40 donuts less than Ed. How many donuts did the 3 boys sell?

Ans: _____ [4]



12. The graph below shows the favourite fruit of a group of pupils.

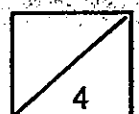


a) What percentage of the total number of pupils liked cherries?

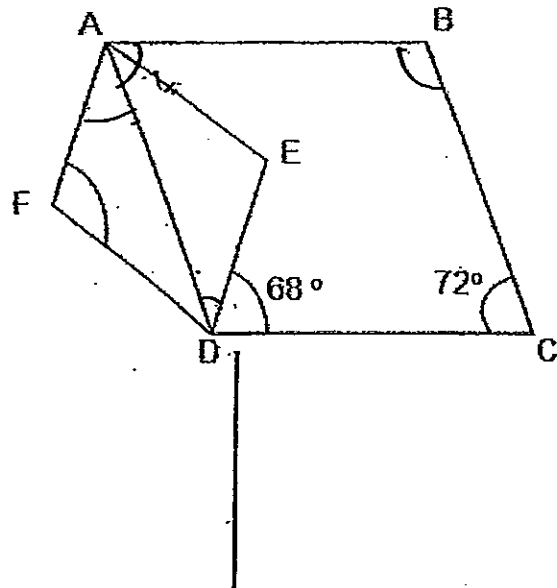
b) 95 girls participated in the survey. What percentage of the boys took part in the survey?

Ans:(a) _____ [1]

(b) _____ [3]



13. In the figure below, not drawn to scale, ABCD and AEDF are rhombuses. Find $\angle AFD$.

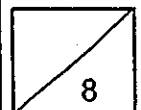


Ans: _____ [4]

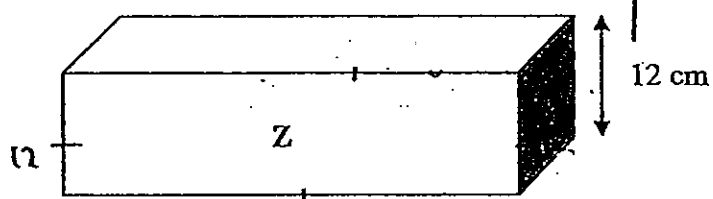
14. Ahmad had 3 albums, P, Q and R. Album P had 4 times as many stamps as Q. He transferred 5 stamps from P to Q and 8 stamps from R to Q. In the end, all the albums had an equal number of stamps. How many stamps did Ahmad have?

Ans: _____ [4]

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this column

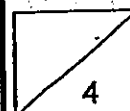


15. The cuboid below has a square face Y and a rectangular face Z.
The area of Y is $\frac{2}{5}$ of the area of Z.
Find the volume of the cuboid.



Do not write in
this column

Ans: _____ [4]



16. In the figure below, not drawn to scale, the area of each of the 5 smaller similar squares is $\frac{1}{4}$ of the area of M. N has an area of 900 cm^2 .

(a) What is the area of the figure ABCD?

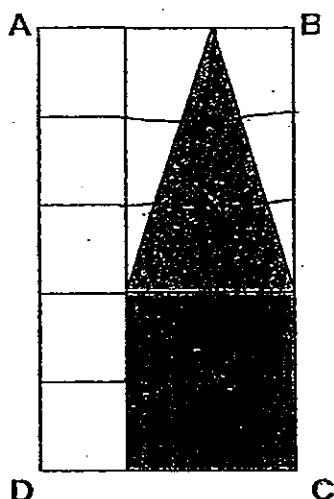


Figure 1, not drawn to scale, shows a rectangle, ABCD. It is folded as shown below in Figure 2. $AC = 12 \text{ cm}$ and $AB = 30 \text{ cm}$.

(b) Find the area of the shaded triangle as shown below.

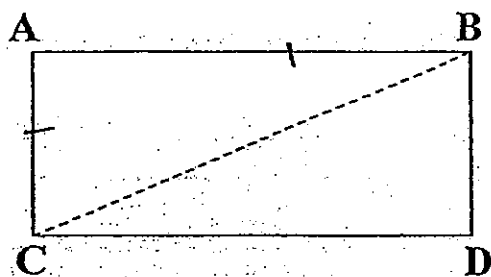


Figure 1

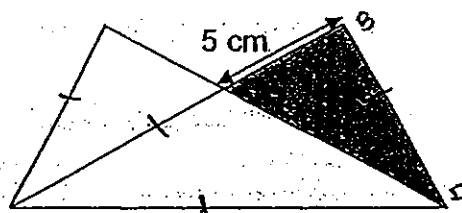
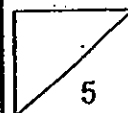


Figure 2

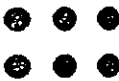
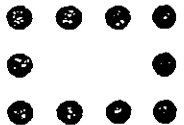
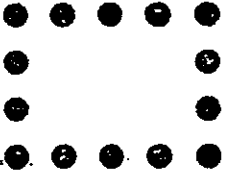
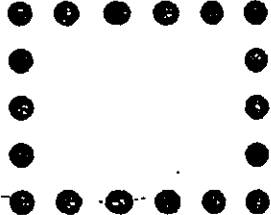
Ans:(a) _____ [3]

(b) _____ [2]



17. Each diagram in the sequence below consists of a number of circles.

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Number of circles				
Diagram	1st	2nd	3rd	4th

(a) Refer to the above sequence and complete the following table below.

Diagram	1st	2nd	3rd	4th	5th
Number of circles	6	10	14	18	?

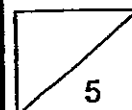
(b) Study the number pattern and write down the number of circles in the 15th diagram.

(c) Which diagram has 102 circles?

Ans: (a) _____ [1]

(b) _____ [2]

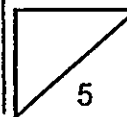
(c) _____ [2]

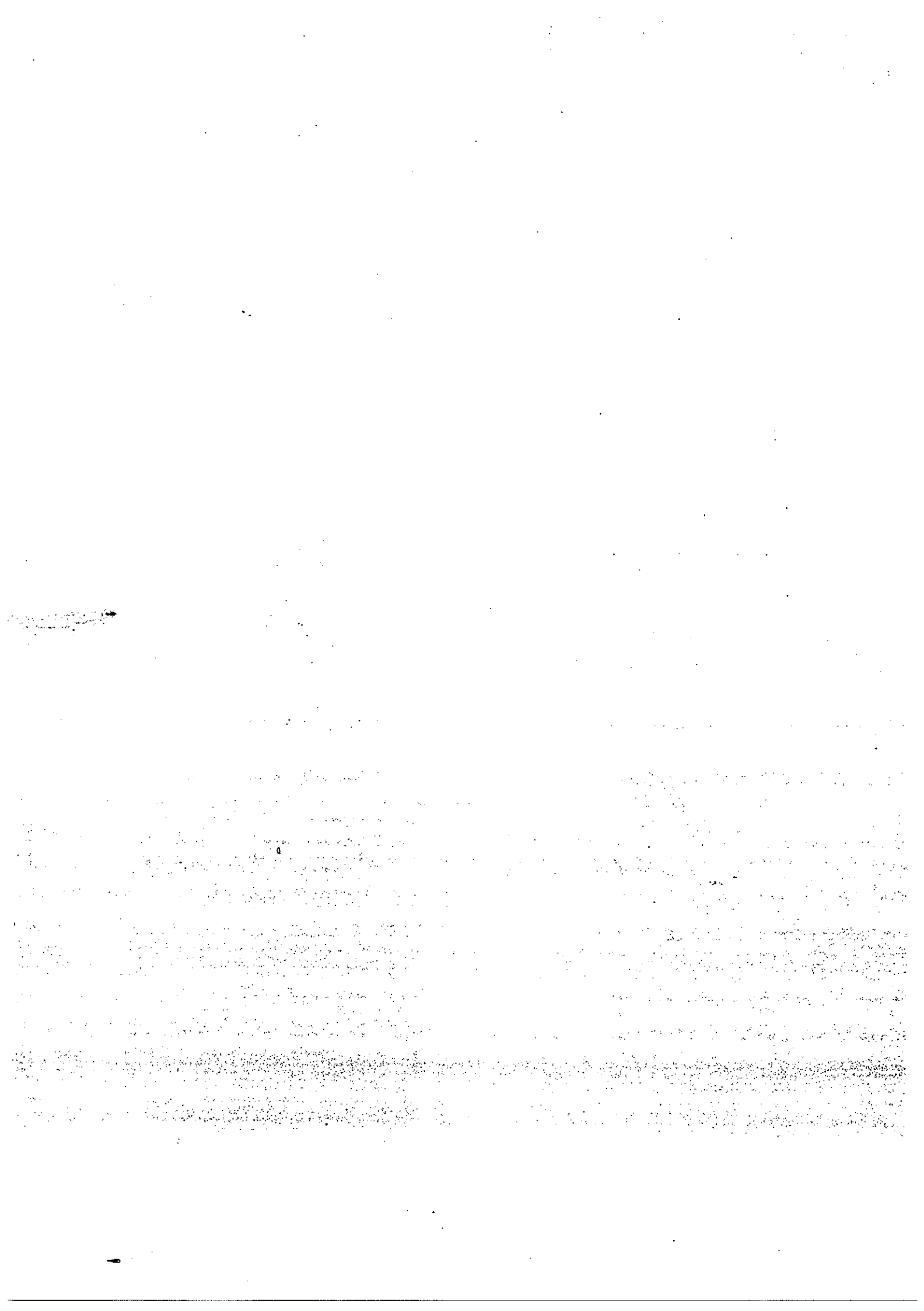


18. Alan had thrice as many stickers as Yvonne. After Alan and Yvonne had given 40% and 20% of their stickers to Wendy respectively, the number of stickers that Wendy had increased by $\frac{1}{4}$. Wendy had 1680 stickers in the end. How many stickers did Yvonne have in the end?

Ans: _____ [5]

End of Paper 2
~ Please check your work thoroughly. ~





Singapore Chinese Girls' School 2013 Primary 5 Mathematic SA2

Paper 1 - Booklet A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	3	4	4	1	2	3	1	1	3	3	4	4	2	4

Paper 1 - Booklet B

16	0.38	17	4005 m	18	\$252	19	42 cm ²
20	300 children	21	7/15	22	17	23	A : B : C = 7 : 35 : 10
24	21 km	25	20	26	\$44	27	48 stickers
28	36 girls	29	4 bars of chocolate	30	250 marbles		

Paper 2

- 1 $\angle ABE = 30^\circ + 44^\circ = 74^\circ$; $\angle BAE = 180^\circ - 46^\circ - 74^\circ = \underline{60^\circ}$
- 2 sale price of pot = $(\$105.90 - \$50.50) / 2 = \$27.70$; Saving on the pot = $\$80 - \$27.70 = \underline{\$52.30}$
- 3 \$300
- 4 Nathan
- 5 Number of rose bushes = $32 / 4 + 2$ overlapping at each corner = 10 rose bushes
- 6 total savings of Cindy and Dan = \$5000; total savings of Eden and Cindy = \$6000
Eden has $\$6000 - \$5000 = \$1000$ more than Dan; $11 - 9 = 2$ units $\rightarrow \$1000$
Dan's savings = 9 units $\rightarrow \$1000 / 2 \times 9 = \underline{\$4500}$
- 7 \$52.20
- 8 cost of 2 T-shirts or bags = $\$31 - \$25 = \$6$; 1 bag cost = $\$6 / 2 = \underline{\$3}$
- 9 \$30
- 10 142 pupils at first
- 11 112 donuts sold
- 12 (a) 20% (b) 62%
- 13 $\angle ADE = \angle DAE = \angle FAD = \angle FDA = 180^\circ - 72^\circ - 68^\circ = 40^\circ$
 $\angle AFD = 180^\circ - 40^\circ - 40^\circ = \underline{100^\circ}$
- 14 57 stamps (P – 24 stamps; Q – 6 stamps; R – 27 stamps at first)
- 15 area of square, Y = $12 \times 12 = 144 \text{ cm}^2$; area of rectangular face Z = $144 / 2 \times 5 = 360 \text{ cm}^2$;
length of side Z = $360 / 12 = 30 \text{ cm}$; volume of cuboid = $30 \times 12 \times 12 = \underline{4320 \text{ cm}^3}$
- 16 (a) 3 squares has an area = 900 cm^2 ; Area of ABCD = 15 squares = 4500 cm^2
(b) Area of shaded triangle = $\frac{1}{2} \times 12 \times 5 = \underline{30 \text{ cm}^2}$
- 17 (a) 22 circles (b) 62 circles (c) 25th diagram
- 18 Yvonne had 192 stickers (Alan had 432 stickers; Wendy had 1680 in the end)

