

SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL ASSESSMENT 2014

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

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. What is 20.09×23 when rounded off to the nearest tenth?

- 1) 460
- 2) 462.0
- 3) 462.1
- 4) 462.3

2. Find the missing number in the box.

$$3\frac{3}{8} - \frac{3}{4} = \boxed{}$$

- 1) $1\frac{3}{8}$
- 2) $2\frac{1}{2}$
- 3) $2\frac{5}{8}$
- 4) $4\frac{1}{8}$

3. Express 101% as a decimal.

- 1) 0.101
- 2) 1.1
- 3) 1.01
- 4) 1.001

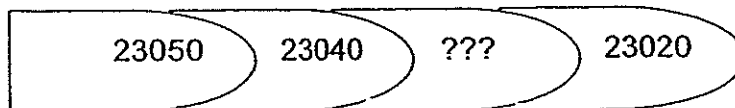
4. Which of the following value is closest to $\frac{1}{5}$?

- 1) 0.19
- 2) 0.22
- 3) 0.25
- 4) 0.27

5. What is the missing number in the box below?

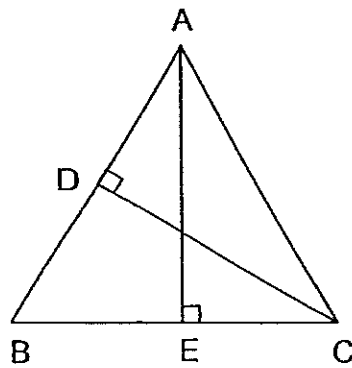
$$\frac{3}{6} = \frac{\square}{10}$$

- (1) 5
 - (2) 7
 - (3) 8
 - (4) 4
6. A tank measuring 20 cm by 15 cm by 14 cm is half-filled with water. How many litres of water are there in the tank?
- (1) 1.05 ℓ
 - (2) 2.1 ℓ
 - (3) 3.6 ℓ
 - (4) 4.2 ℓ
7. What is the missing number?



- (1) 22030
 - (2) 23030
 - (3) 23130
 - (4) 24130
8. What is 899 889 less than 1 million?
- 1) 100 111
 - 2) 101 111
 - 3) 110 101
 - 4) 111 111

9. Which is the **height** to the base AB of triangle ABC?



- 1) AC
- 2) AE
- 3) BC
- 4) CD

10. Tom has 15 sweets while Jerry has 9 sweets. How many sweets does Jerry need to give to Tom such that the ratio of the number of sweets Tom has to the number of sweets Jerry has is $\frac{x}{5}:1$?

- 1) 5
- 2) 6
- 3) 10
- 4) 4

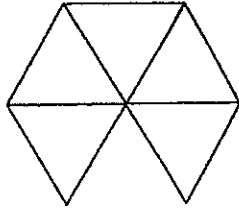
11. The average of 3 different numbers is 10. Which is the largest possible number if the smallest number is 6?

- 1) 10
- 2) 11
- 3) 17
- 4) 18

12. Which of the following has the same value as $8 \times 5 + 16 \div (4 - 2)$?

- 1) $40 + 2$
- 2) $40 + 8$
- 3) 8×7
- 4) 8×13

13. The figure below is made up of equilateral triangles. What is the maximum number of parallelograms you can find in this figure?



- (1) 6
(2) 2
(3) 8
(4) 4
14. Sandy and Paul had an equal number of stickers at first. Sandy then sold $\frac{1}{4}$ of her stickers while Paul sold $\frac{1}{3}$ of his. What is the ratio of the total number of stickers sold to the total number of stickers left?
- 1) 3:12
2) 7:12
3) 7:17
4) 17:24
15. Mrs Lim had 6 chocolate chip cookies and 14 blueberry cookies at first. She then decided to buy 5 more chocolate chip cookies. Express the number of cookies bought as a percentage of the total number of cookies she has now.
- 1) 20%
2) 25%
3) 44%
4) 55%

SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL ASSESSMENT 2014

PRIMARY 5
MATHEMATICS
PAPER 1
BOOKLET B

Name : _____ ()

Class : Primary 5 S'

Paper 1	Mark attained	Max Mark
Booklet B		20

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

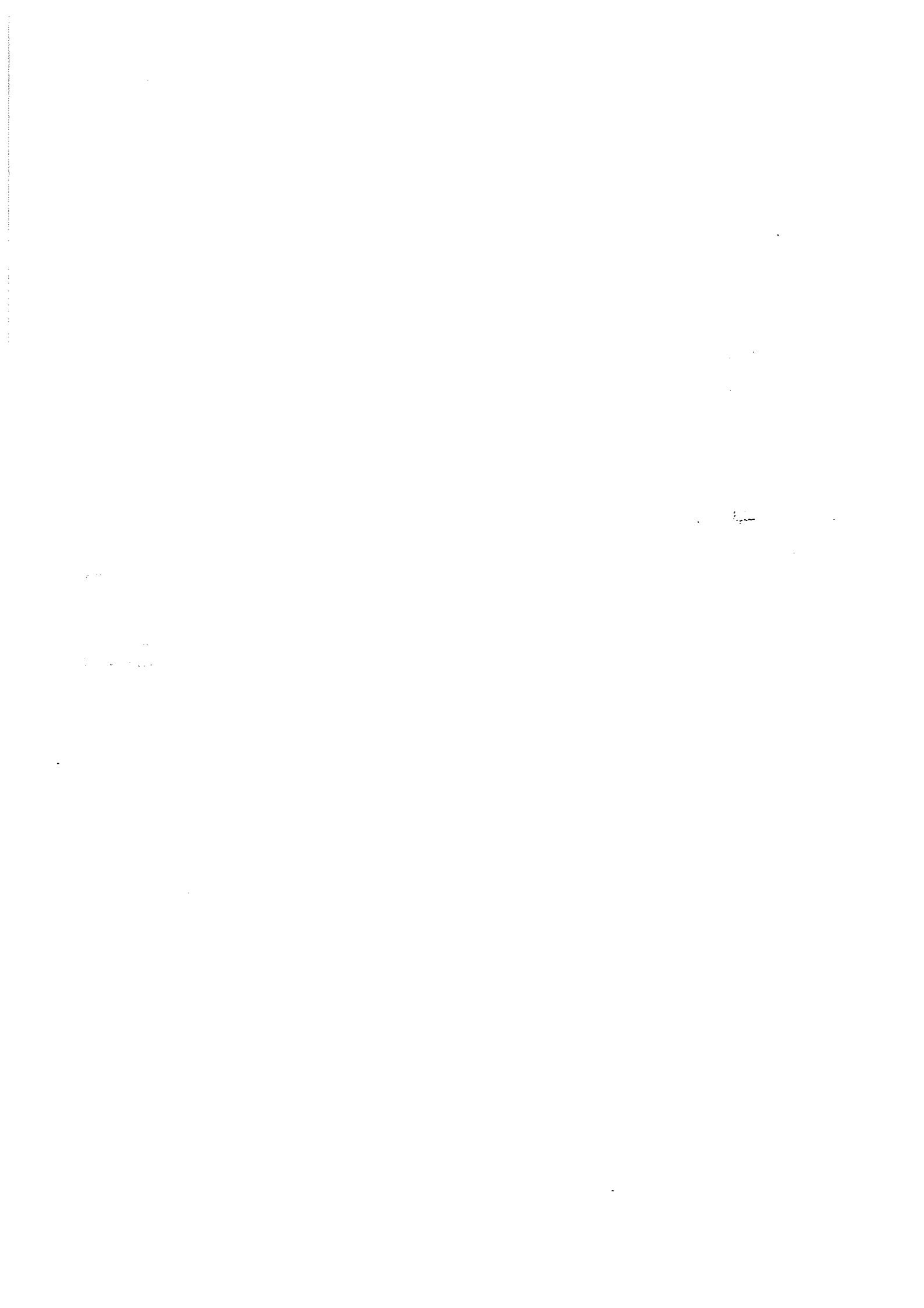
INSTRUCTIONS TO CANDIDATES

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



Booklet B

Name: _____ () Class: P5

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in 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. 4 bottles of water, 2 l each, was shared among some children. How many children are there if each child received 500 ml?

Ans: _____

17. Write $\frac{7}{9}$ as a decimal, rounded off to 2 decimal places.

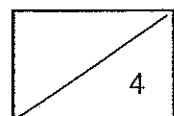
Ans: _____

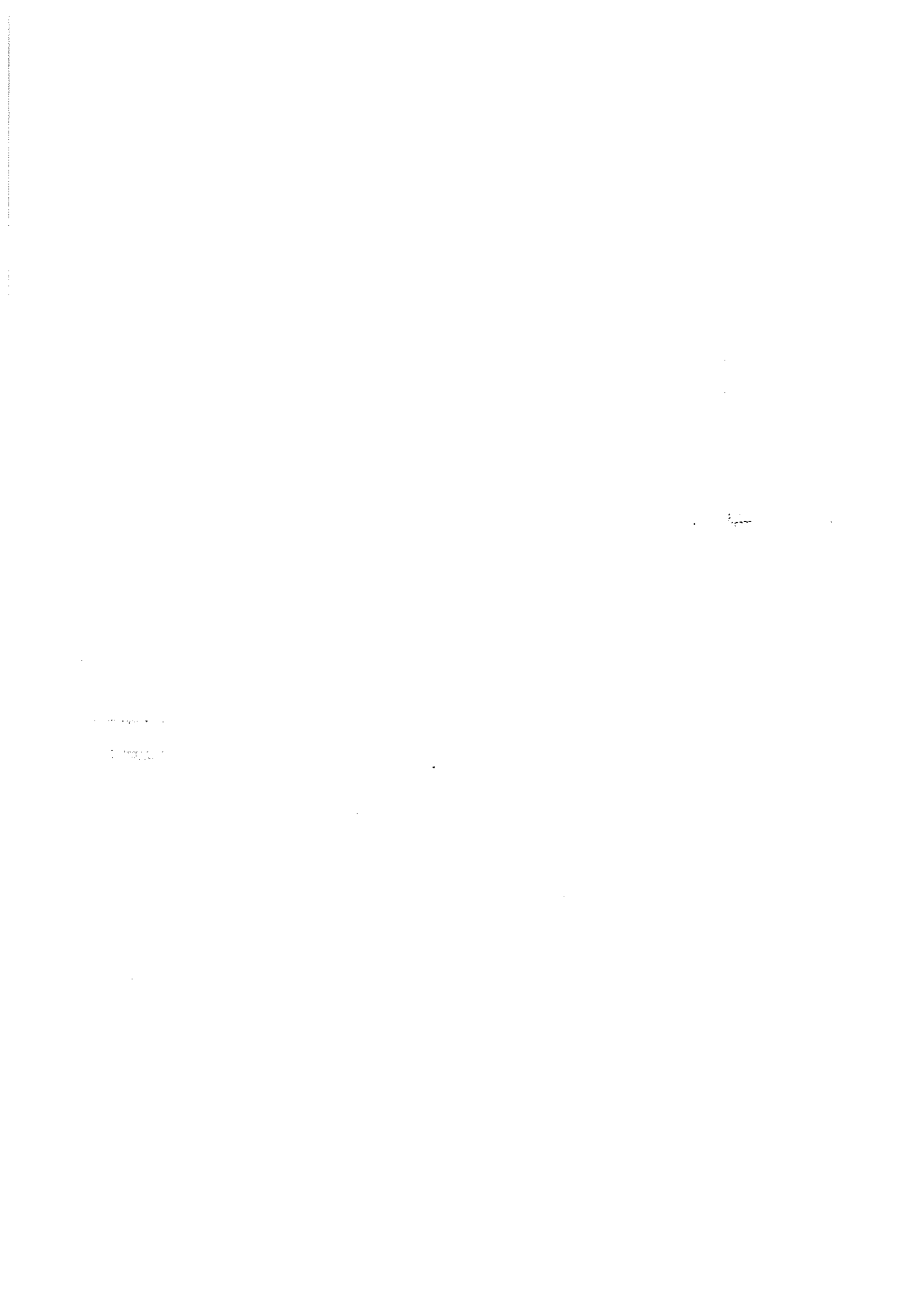
18. When a number is divided by 5, the quotient is 13 and the remainder is $\overset{3}{8}$. What is the number?

Ans: _____

19. $30.27 \div 3 =$

Ans: _____





20. Carrie, Devina and Farinah weigh 42 kg, 51 kg, and 39 kg respectively. What is their average weight?

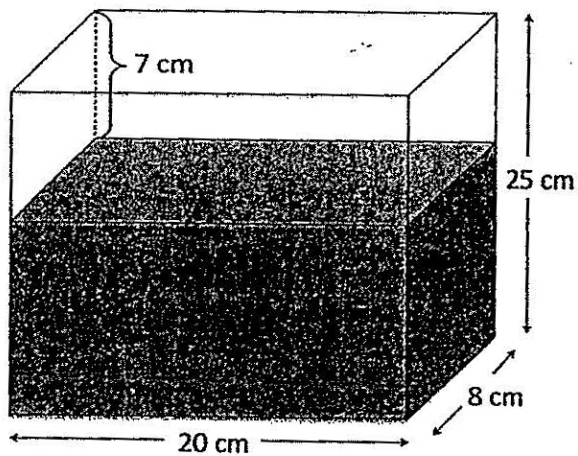
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Ans: _____ kg

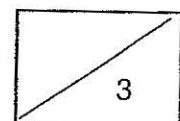
21. Jamie and Ali shared 65 cookies in the ratio of 7 : 6 respectively. Ali ate $\frac{1}{3}$ of his cookies. How many cookies had he left?

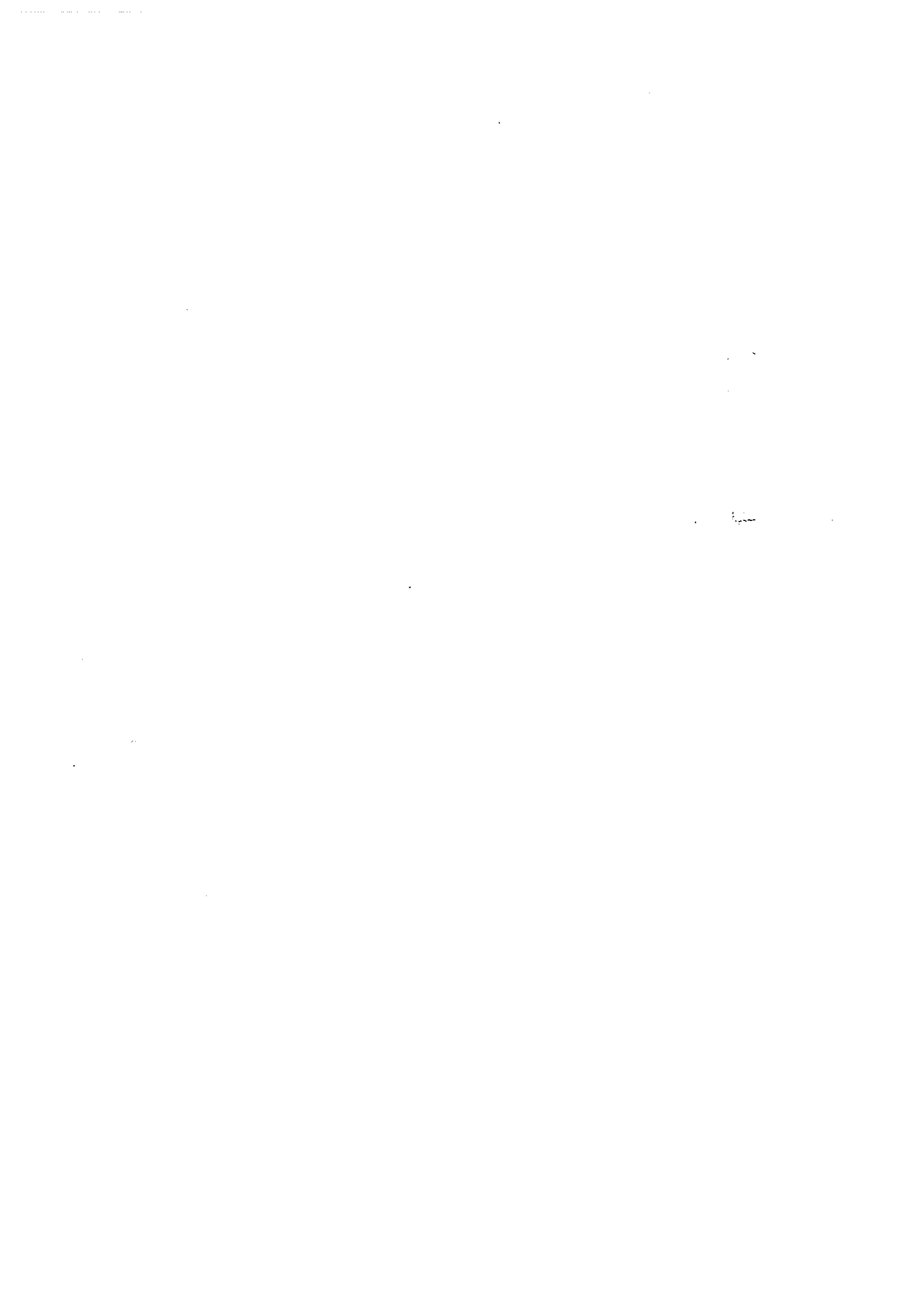
Ans: _____

22. Find the volume of water in this container.

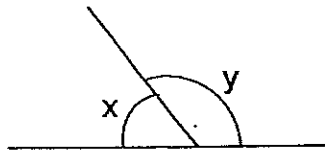


Ans: _____ cm³





23. In the figure, the size of $\angle x$ is $\frac{1}{5}$ of $\angle y$. Find $\angle y$.

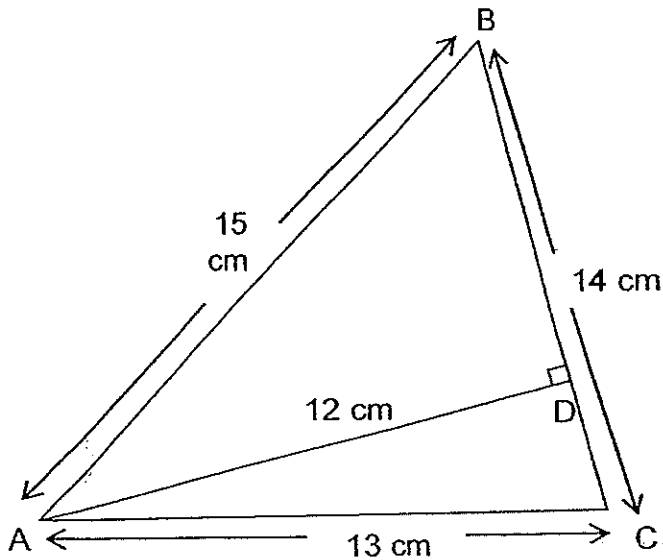


Ans: _____

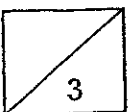
24. How many 3-cm cubes can fit into a tank measuring 30 cm by 14 cm by 13 cm?

Ans: _____

25. Find the area of triangle ABC below.



Ans: _____ cm²



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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26. Ahmad had $\frac{3}{4}$ as many sweets as chocolates. He ate 5 pieces of sweets and the ratio of the number of chocolates to the number of sweets became 3 : 2. How many sweets and chocolates did Ahmad have at first?

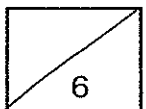
Ans: _____

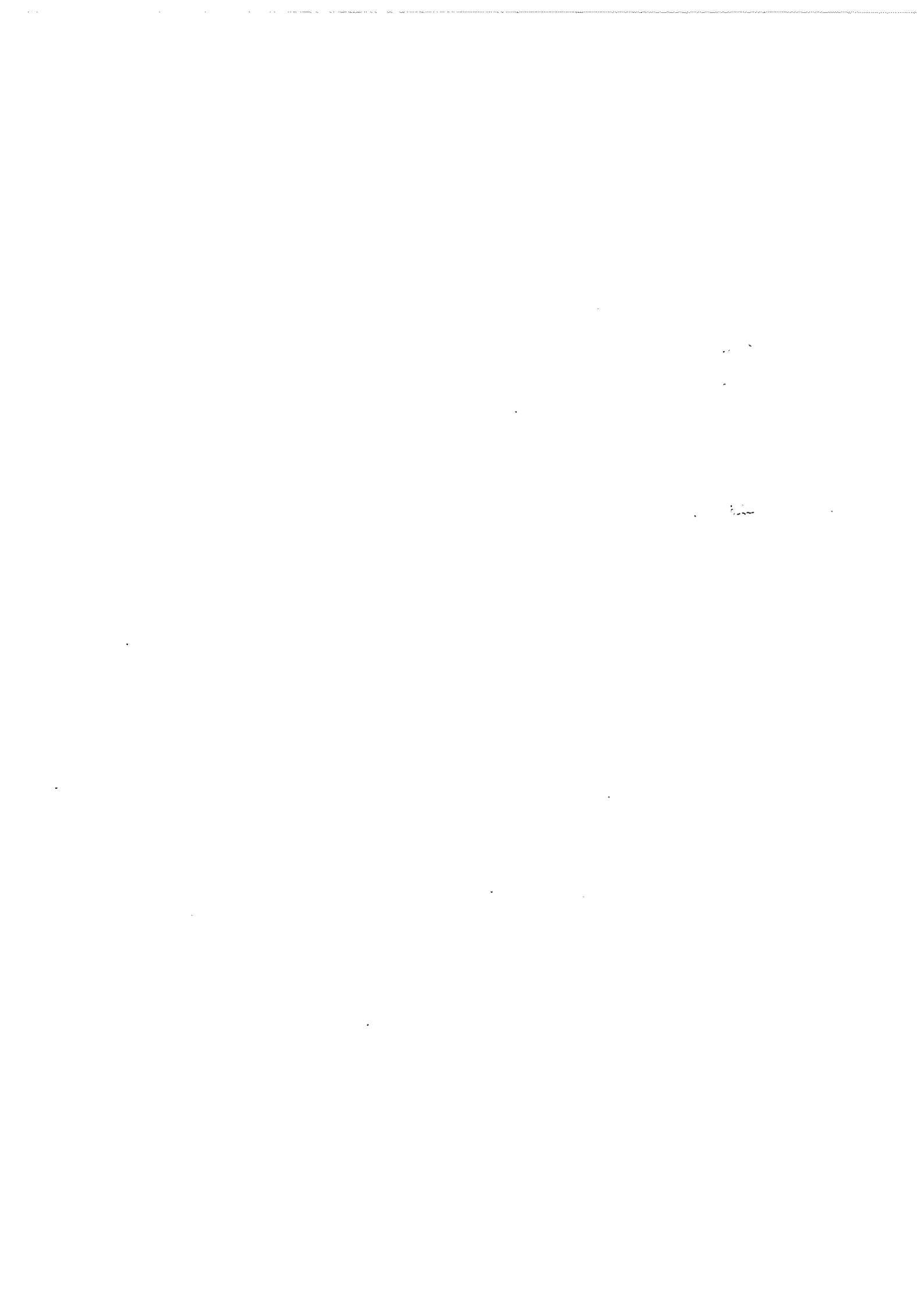
27. Jenny bought 3 sandwiches and 4 drinks. Each sandwich costs \$2.25 more than a drink. How much did Jenny spend if each sandwich costs \$3.50?

Ans: \$ _____

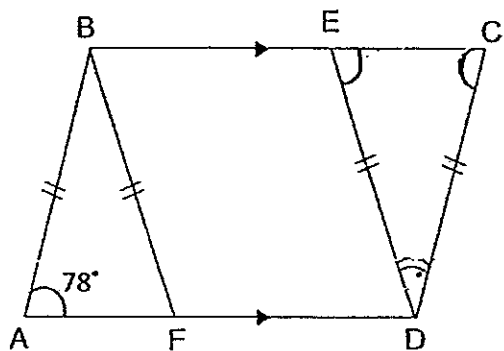
28. Peter, James and Simon collected a total of 315 stamps. Peter had 3 times as many stamps as Simon. James had 5 fewer stamps than Simon. How many stamps did James have?

Ans: _____



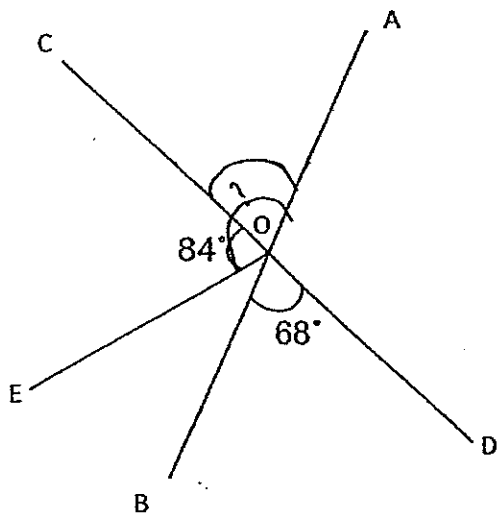


29. The figure ABCD is a parallelogram. Given that $\angle BAF$ is 78° , find $\angle EDC$.



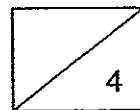
Ans: _____

30. AB and CD are straight lines. Find $\angle AOE$.



Ans: _____

End of paper
- Check your work thoroughly -



SINGAPORE CHINESE GIRLS' SCHOOL
SECOND SEMESTRAL ASSESSMENT 2014

PRIMARY 5
MATHEMATICS
PAPER 2

Name : _____ ()

Class : Primary 5

	Mark	Max Mark
Paper 2		60

Parent's Signature

18 Questions
60 Marks

Total Time For Paper 2: 1 h 40 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Name: _____ (. .) Date: _____
Class: Primary 5

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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)

1. The average mass of 9 people is 58.8kg. The average mass of 3 of them is 60.4kg. What is the total mass of the remaining people?

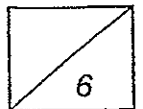
Ans: _____ kg

2. Kellie and Qing Qing has \$361 and \$175 respectively. How much money does Kellie have to give Qing Qing so that they have the same amount of money?

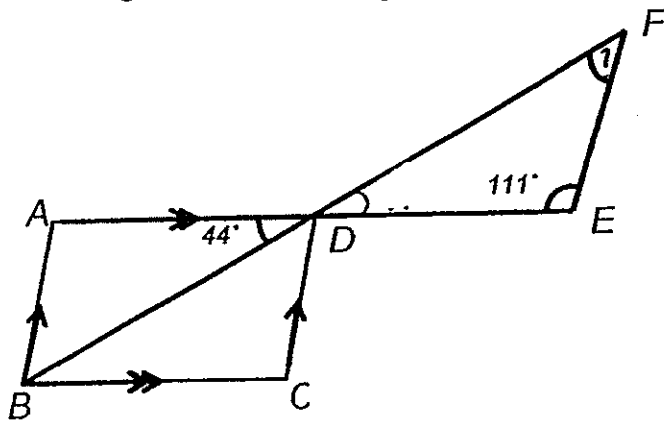
Ans: \$ _____

3. Nathan has some red, blue and green marbles. 40% of the marbles are green and 25% of the marbles are blue. How many red marbles does Nathan have if he has a total of 300 marbles?

Ans: _____



4. In the figure below, ABCD is a parallelogram. Lines BF and AE are straight lines. Find $\angle DFE$.

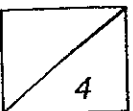


Ans: _____

5. Jasmine and 5 of her friends shared a pizza. Since it was her birthday, she ate $\frac{1}{4}$ more than each of her friends. What fraction of the pizza did each of her friends eat?

Ans: _____

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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.

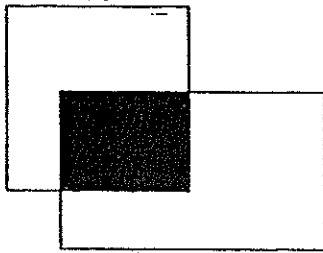
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(50 marks)

6. In a farm, the number of cows is $\frac{2}{7}$ the number of chickens. There are a total of 352 legs in the farm. How many more chickens than cows are there in the farm?

Ans: _____ [3]

7. The figure is made up of a square and a rectangle. The area of the square is $\frac{1}{3}$ that of the rectangle. The shaded area of the square is 10 cm^2 . Given that $\frac{2}{3}$ of the square is shaded, what area of the rectangle that is not shaded?



Ans: _____ [3]

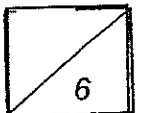
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8. On reaching a bus stop, $\frac{1}{2}$ of the females and $\frac{1}{3}$ of the males alighted from the bus. The number of females that remained on the bus was twice the number of males left on the bus. Given that 10 males remained on the bus, how many passengers were there at first?

Ans: _____ [3]

9. 3 computer labs were allocated to 4 classes for a week. Each computer lab was available for 3 hours each day. If each class spent an equal amount of time in the lab, how many hours did each class get a week? (Assume 5 days a week. Give your answer in hours and minutes.)

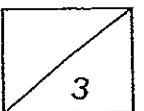
Ans: _____ [3]



10. Jamie went shopping with \$65 and saw a dress that costs \$90. The dress was on a 15% Great Singapore Sale (GSS) discount. She decided to buy the dress as she had an additional 20% membership discount after the GSS discount. How much money does she have left after buying the dress?

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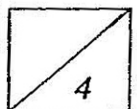
Ans: _____ [3]



11. Mrs Pang had a bag of flour. She used $\frac{1}{3}$ of it to make 10 cupcakes and $\frac{3}{4}$ of the remaining flour to make 9 pieces of bread. Given that each piece of bread needs 60 g more flour than a cupcake, how much flour did Mrs Pang have at first?

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this column

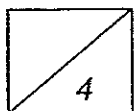
Ans: _____ . [4]



12. Ali, Bernard and Charlie shared some stamps. The ratio of Ali's stamps to Bernard's stamps was 1:3. After Charlie received $\frac{1}{3}$ of Ali's stamps and $\frac{1}{2}$ of Bernard's stamps, the number of stamps he had doubled to 308 stamps. How many stamps did Ali, Bernard and Charlie have altogether?

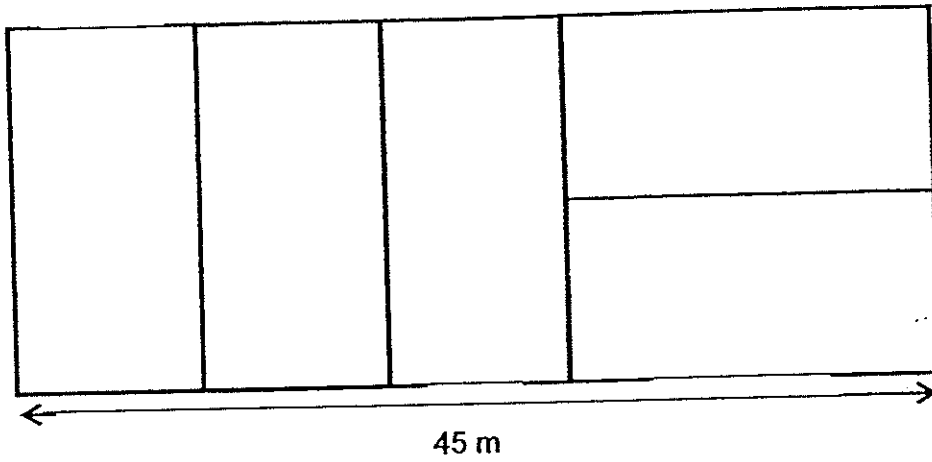
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Ans: _____ [4]



13. The figure below shows a field made up of 5 identical rectangular courts.

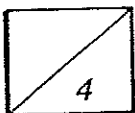
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- (a) What is the ratio of the length to the breadth of the field? (2 marks)
(b) Find the area of the field. (2 marks)

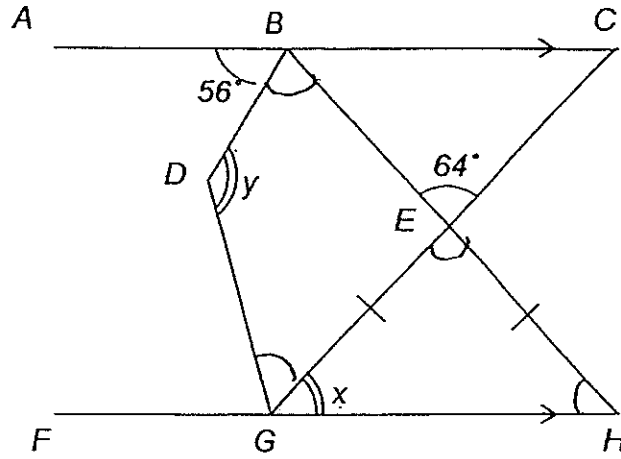
Ans: (a) _____ [2]

(b) _____ [2]

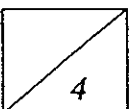


14. In the figure below, line AC is parallel to line FH. Line GC cuts $\angle DGH$ into half. Given that $\angle ABD = 56^\circ$ and $\angle BEC = 64^\circ$, find:
 (a) the value of $\angle x$ and
 (b) the value of $\angle y$.

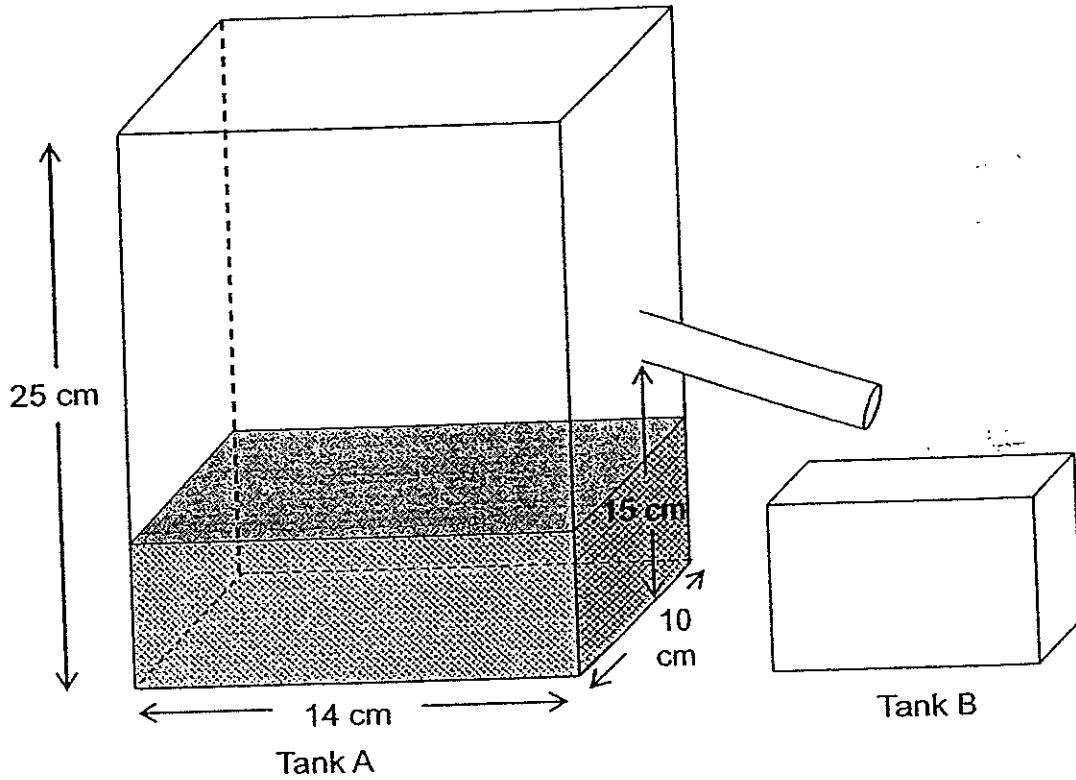
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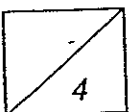
Ans: (a) _____ [2]
 (b) _____ [2]



15. Tank A is 14 cm by 10 cm by 25 cm and is $\frac{2}{5}$ -filled with water. There is an opening at a height of 15 cm that allows water to flow into Tank B. If 7 cups of water, each having a volume of 110 cm^3 , are added into Tank A, how much water will flow into Tank B? (Express your answer in cm^3)



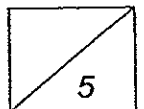
Ans: _____ [4]



16. There was a concert held at Esplanade concert hall and a total of \$9100 was collected from the sale of tickets. Each adult ticket cost \$35 and each child ticket costs $\frac{2}{5}$ as much as an adult ticket. Given that $\frac{3}{7}$ of the audience were children and the concert hall was fully packed, what is the seating capacity of the concert hall?

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this column

Ans: _____ [5]



17. Study the pattern below.

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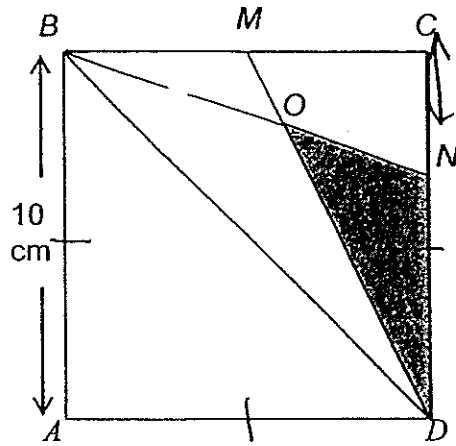
							Sum
Row 1:				1			1
Row 2:			1		1		2
Row 3:			1	2		1	
Row 4:		1	3		3	1	
Row 5:		1	4	6		4	1
Row 6:	1	5	10	10	5	1	

- (a) What is the largest number in row 6? (1 mark)
 (b) What is the sum of the numbers in row 6? (2 marks)
 (c) Which row has a sum of numbers of 1024? (2 marks)

Ans: (a) _____ [1]
 (b) _____ [2]
 (c) _____ [2]

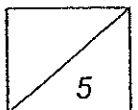
18. The figure below shows a square ABCD. BN and MD are straight lines. The length of square ABCD is 10 cm and the length DN is 3 times of line CN. Given that M is the midpoint of line BC and the area of triangle BMO is 5 cm^2 , find the area of the shaded triangle DNO.

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Ans: _____ [5]

End of Paper
- Check your work thoroughly -



EXAM PAPER 2014**LEVEL : PRIMARY 5****SCHOOL : SCGS****SUBJECT : MATHS****TERM : SA2**

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

Q16 16

Q17 0.78

Q18 68

Q19 10.09

Q20 44kg

Q21 20

Q22 2880cm³

Q23 150°

Q24 160

Q25 84cm²

Q26 105

Q27 \$15.50

Q28 59

Q29 24°

Q30 152°

Q1 Total mass for 9 people = $58,8\text{kg} \times 9 = 529.2\text{kg}$
 Total mass of 3 people = $60.4\text{kg} \times 3 = 181.2\text{kg}$
 Total mass of remaining people = $529.2\text{kg} - 181.2\text{kg} = 348\text{kg}$

Q2 $\$361 - \$175 = \$186$
 $\$186 \div 2 = \93

Q3 20 units \rightarrow 300
 1 unit \rightarrow 15
 2 units + 5 units = 7 units
 20 units - 7 units = 13 units
 13 units \rightarrow $15 \times 13 = 195$

Q4 $44^\circ + 111^\circ = 155^\circ$
 $\angle DEF \rightarrow 180^\circ - 155^\circ = 25^\circ$

Q5 J : F
 5 : 4

$4 \times 5 = 20$
 $20 + 5 = 25$

Fraction of pizza each friend ate $\frac{4}{25}$

Q6

c4) cows : chickens (2)
 $\frac{2}{352 \text{ legs}}$
 $\frac{4 \times 2 = 8}{7 \times 2 = 14}$
 1 group $\rightarrow 8 + 14 = 22$
 no. of groups $\rightarrow 352 \div 22 = 16$
 $16 \times 2 = 32$
 more $\rightarrow 16 \times 5 = 80$

Q7 2 units $\rightarrow 10\text{cm}^2$
 1 units $\rightarrow 5\text{cm}^2$
 3 units $\rightarrow 15\text{cm}^2$ (Area of square)
 $15 \times 3 = 45\text{cm}^2$ (Area of rectangle)

9 units $\rightarrow 45\text{cm}^2$
 9 units - 2 units = 7 units (Unshaded area of rectangle)
 7 units $\rightarrow 35\text{cm}^2$

Q8 Female : Male
 2 : 1
 (20) (10) \rightarrow (remained on bus)
 40 30 \rightarrow (on the bus at first)

$40 + 30 = 70$ (Total passengers at first)

Q9 $3 \times 3 = 9$
 $9 \times 5 = 45$
 45 hours = 2700 mins
 $2700\text{mins} \div 4 = 675\text{mins}$
675 mins = 11hrs 15mins

Q10 $100\% - 15\% = 85\%$
 $\frac{85}{100} \times \$90 = \76.50
 $100\% - 20\% = 80\%$
 $\frac{80}{100} \times \$76.50 = \61.20
 $\$65 - \$61.20 = \mathbf{\$3.80}$

Q11 $9 \div 3 = 3$
 3 bread = 5 cupcakes
 $3 \times 60\text{g} + 3 \text{ cupcakes} = 5 \text{ cupcakes}$
 2 cupcakes = 180g
 5 cupcakes = 450g (1unit)
 6 units $\rightarrow 450 \times 6 = \mathbf{2700\text{g} = 2.7\text{kg}}$

Q12 A : B : C
 1 : 3 (308)
 3 : 9
 1 : 4.5 : (1+4.5)

$308 \div 2 = 154$
 5.5 units $\rightarrow 154$
 $154 + 308 = \mathbf{462}$

Q13 (a) **The ratio is 5 : 2**

(b) 5 units $\rightarrow 45\text{cm}$
 1 unit $\rightarrow 9\text{cm}$
 2 units $\rightarrow 18\text{cm}$

Area of field = $45\text{cm} \times 18\text{cm}$
 $= \mathbf{810\text{cm}^2}$

Q14 (a) $180^\circ - 64^\circ = 116^\circ$
 $\angle x = 116^\circ \div 2 = \mathbf{58^\circ}$

(b) $\angle BEG = 180^\circ - 64^\circ = 116^\circ$
 $\angle DBE = 180^\circ - 56^\circ - 58^\circ = 66^\circ$
 $58^\circ + 116^\circ + 66^\circ = 240^\circ$
 $\angle y = 360^\circ - 240^\circ = \mathbf{120^\circ}$

Q15 Volume of tank = $14\text{cm} \times 10\text{cm} \times 25\text{cm} = 3500\text{cm}^3$
 Volume of water = $\frac{2}{5} \times 3500\text{cm}^3 = 1400\text{cm}^3$
 Volume of water (7 cups) = $7 \times 110\text{cm}^3 = 770\text{cm}^3$
 Total Volume of water = $1400\text{cm}^3 + 770\text{cm}^3 = 2170\text{cm}^3$
 Volume of tank to the opening = $14\text{cm} \times 10\text{cm} \times 15\text{cm} = 2100\text{cm}^3$
Volume of water flow to tank B = $2170\text{cm}^3 - 2100\text{cm}^3 = 70\text{cm}^3$

Q16

$$\begin{aligned}
 1A &\rightarrow \$35 \\
 1c &\rightarrow \frac{2}{5} \times \$35 = \$14 \\
 c &: A \\
 3 &: 4 \\
 c &\rightarrow \$14 \times 3 = \$42 \\
 A &\rightarrow \$35 \times 4 = \$140 \\
 1 \text{ group} &\rightarrow \$140 + \$42 = \$182 \\
 \text{No. of groups} &\rightarrow \$9100 \div \$182 = 50 \\
 4u + 3u &= 7u \\
 \text{Capacity} &\rightarrow 7u \rightarrow 50 \times 7 = 350
 \end{aligned}$$

Q17

		SUM
Row 1	1	1
Row 2	1 1	2
Row 3	1 2 1	4
Row 4	1 3 3 1	8
Row 5	1 4 6 4 1	16
Row 6	1 5 10 10 5 1	32
Row 7	1 6 15 20 15 6 1	64
Row 8	1 7 21 35 35 21 7 1	128
Row 9		256
Row 10		512
Row 11		1024

- (a) The largest number is 20
- (b) The sum is 64
- (c) Row 11

Q18

$$\begin{aligned}
 3u + 4u &= 7u \\
 4u &\rightarrow 10 \text{ cm} \\
 1u &\rightarrow 10 \text{ cm} \div 4 = 2.5 \text{ cm} \\
 \Delta B M C N &\rightarrow \frac{1}{2} \times 10 \times 2.5 \text{ cm} = 12.5 \text{ cm}^2 \\
 10 \text{ cm} &\div 2 = 5 \text{ cm} \\
 \Delta M C P &\rightarrow \frac{1}{2} \times 5 \text{ cm} \times 10 \text{ cm} = 25 \text{ cm}^2 \\
 25 \text{ cm}^2 - 12.5 \text{ cm}^2 &= 12.5 \text{ cm}^2 \\
 \text{Shaded triangle} &\rightarrow 5 \text{ cm}^2 + 12.5 \text{ cm}^2 = 17.5 \text{ cm}^2
 \end{aligned}$$

