603 / SA1 / 6

Name: _____ ( )

Class: Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 6 Mathematics

2019 Mid-Year Assessment

Paper 1

Booklet A

14 May 2019

15 questions
20 marks

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of calculators is **NOT** allowed.

This booklet consists of 9 printed pages.

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 12 739, the digit 2 is in the _____ place.

   (1) tens

   (2) hundreds

   (3) thousands

   (4) ten thousands

2. Which one of the following is a common multiple of 4 and 9?

   (1) 16

   (2) 27

   (3) 32

   (4) 36

3. Alfred had \$6y. After he bought some pens at \$2 each, he had \$$y$ left. How many pens did he buy?

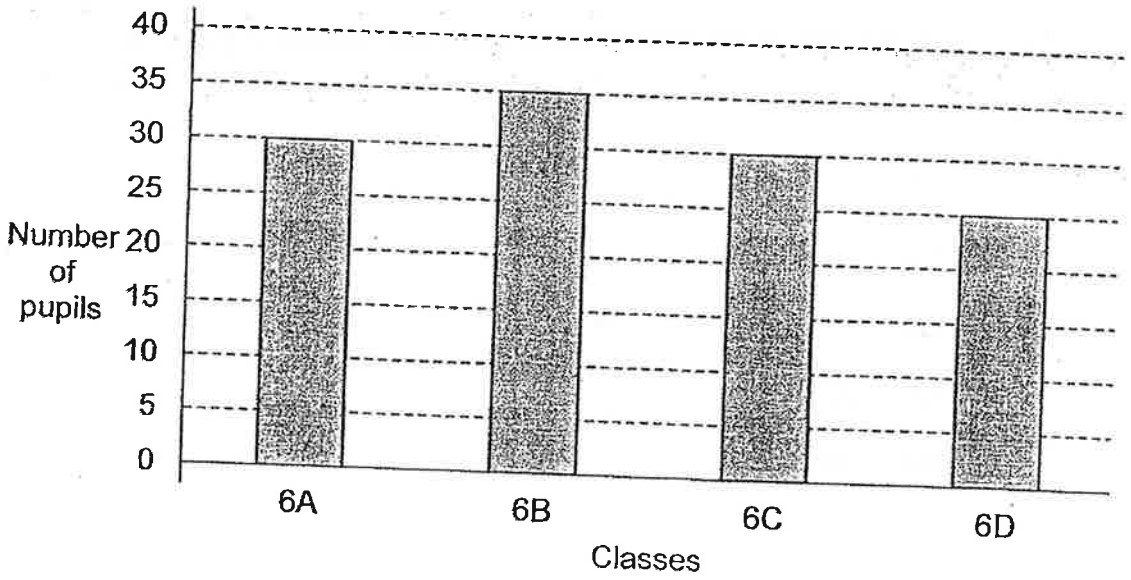
(1) $\frac{5y}{2}$

(2) $\frac{7y}{2}$

(3) $10y$

(4) $14y$

4. The bar graph shows 75% of the pupils in Primary Six who took part in their school charity walk.



What is the total number of pupils in Primary Six?

(1) 120

(2) 150

(3) 160

(4) 200

5. Muthu spent $4.20 to buy 4 similar erasers. How much did each eraser cost?

(1) $1.05

(2) $1.50

(3) $16.80

(4) $16.84

6. Maison, Nora and Osman shared 320 coloured sticks in the ratio 4 : 1 : 5. How many coloured sticks did Maison and Osman share altogether?

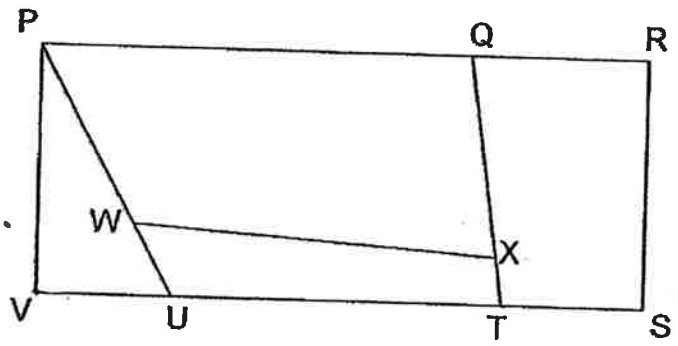
(1) 128

(2) 160

(3) 288

(4) 576

7. In the figure below, PRSV is a rectangle.



Which one of the following lines is perpendicular to line VT?

(1) WX

(2) QT

(3) PV

(4) PQ

8. In a fish tank, there are 15 guppies and some angelfish. 40% of the fishes in the tank are angelfish. How many angelfish are there in the tank?

(1) 9

(2) 10

(3) 16

(4) 25

9. Mia bought a canned drink from a vending machine. Which one of the following is likely to be the capacity of the canned drink?

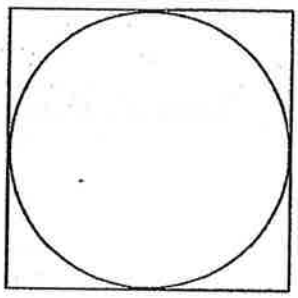
(1) 15 ml

(2) 35 ml

(3) 350 ml

(4) 3530 ml

10. The figure below shows a circle in a square. The perimeter of the square is 36 cm. Find the circumference of the circle. Give your answer in terms of π.



(1) 18π cm

(2) 12π cm

(3) 9π cm

(4) 6π cm

11. Gillian is 8 years older than her brother. Last year, she was twice as old as her brother. How old is Gillian now?

(1) 8

(2) 9

(3) 16

(4) 17

12. Sean, Fandi and George were conducting an experiment on wind energy. They measured the distance that their toy boat travelled on water and recorded the results in the table below. The average distance travelled by the 3 toy boats was 1.3 m. What was the distance travelled by George's toy boat?

Name	Distance travelled by toy boat (m)
Sean	1.15
Fandi	1.55
George	?

(1) 0.9 m

(2) 1.2 m

(3) 1.4 m

(4) 2.7 m

13. Dominic, Erica and Francis received a sum of money in the ratio 3 : 1 : 8. When Francis gave Erica half of his money and Dominic gave $8 to Erica, the ratio of the amount of money Dominic had to the amount of money Erica had to the amount of money Francis had became 1 : 3 : 2. How much money did the three of them receive altogether?

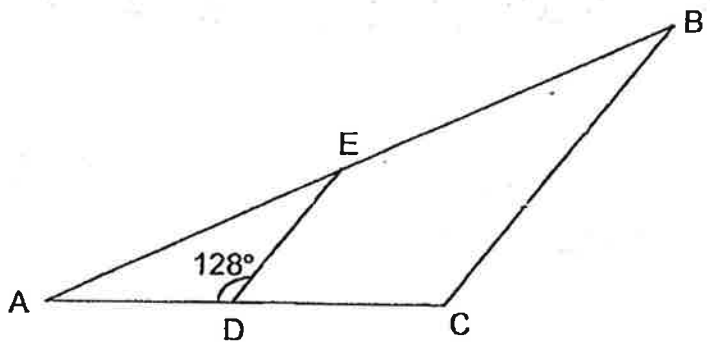
(1) $24

(2) $48

(3) $88

(4) $96

14. ABC is an isosceles triangle. DE // CB and ∠ADE = 128°. Find ∠BAC.



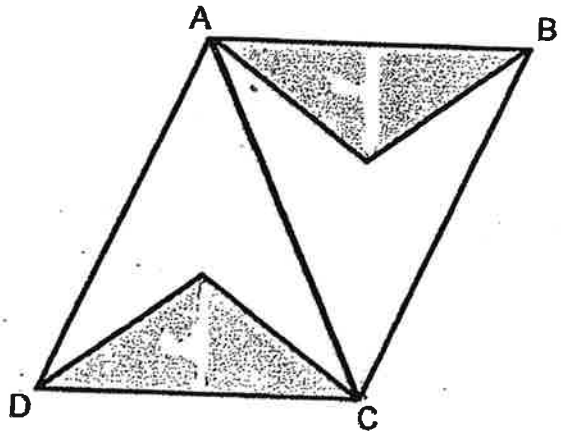
(1) 26°

(2) 32°

(3) 52°

(4) 64°

15. Figure ABCD is made up of 2 big identical triangles ABC and ADC. In each of Triangle ABC and Triangle ADC, there is an identical shaded triangle. The height of triangle ABC is 3 times the height of the shaded triangle in it. What fraction of Figure ABCD is shaded?



(1) $\frac{1}{6}$

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

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

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

Name: _____ (

Class: Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 6 Mathematics

2019 Mid-Year Assessment

Paper 1

Booklet B

14 May 2019

Booklet A	**20**
Booklet B	**25**
Total (Paper 1)	**45**

15 questions
25 marks

Total Time for Booklets A and B: 1 hour

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of calculators is **NOT** allowed.

This booklet consists of 8 printed pages.

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

(5 marks)

Do not write in this space

16. Find the value of $3c + \frac{4c}{9}$ when $c = 3$.

Leave your answer as a mixed number.

Ans: _____

17. Find the value of $\frac{6}{7} \div 12$.

Ans: _____

18. Find the value of 4.6×800.

Ans: _____

MARKS:

19. What is the missing number in the box?

$\boxed{?} : 40 = 14 : 16$

Ans: _____

20. Express 2.3 as a percentage.

Ans: _____ %

Do not write in this space

MARKS:

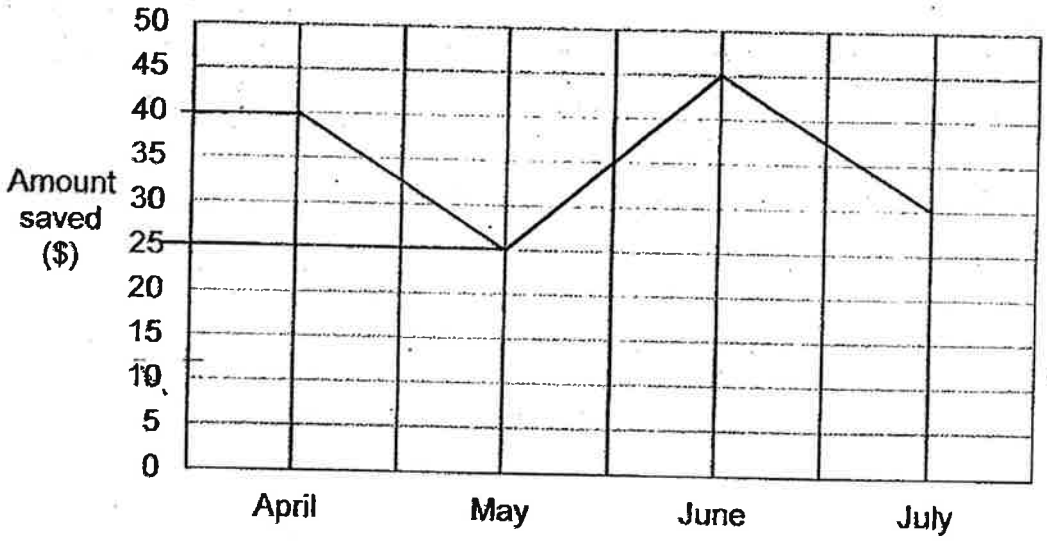
Questions **21** to **30** carry 2 mark each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

Do not write in this space

21. Use all the digits 1, 4, 6, 8 to form the greatest multiple of 4.
Each digit should be used once only.

Ans: _____

22. The line graph shows the amount of money Georgina saved from April to July.



What was the percentage decrease in her savings from April to May?

Ans: _____ %

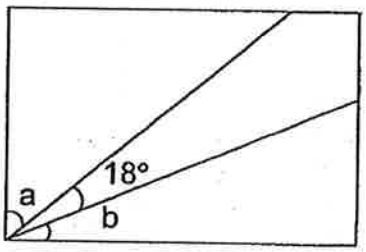
MARKS:

23. The total mass of 5 identical packets of noodles is 2.05 kg. Find the total mass of 3 such packets of noodles.

Do not write in this space

Ans: _____ g

24. The figure below is a rectangle. ∠a is twice the size of ∠b. Find ∠b.



Ans: _____ °

25. Raja spent a total of $67 on some party poppers and light sticks. He bought 42 party poppers at 6 for $5. The light sticks he bought were sold at $4 each. How many light sticks did he buy?

Ans: _____

MARKS:

26. The table below shows the prices of a particular brand of shampoo from 3 different shops.

Do not write in this space

	Homely Mart	Save Extra Mart	Shop Paradise
Price before discount	$10.50	$12	$12
Discount	No discount	10% off	$3 for every 2 bottles purchased

The statement below is either true, false or not possible to tell from the information given. Put a tick (✓) in the correct column.

	True	False	Not possible to tell
(a) Purchasing 2 bottles of shampoo from Homely Mart is the most expensive choice.			
The percentage discount for purchasing 2 bottles of shampoo from Shop Paradise is 25%.			

MARKS:

27. Juleha had some flour to bake cupcakes and cookies. After using $\frac{3}{5}$ of the flour for the cupcakes and 300 g of flour for the cookies, she had 90 g of flour left. What was the mass of flour she had at first?

Do not write in this space

Ans: _____ g

28. Diana and Elizabeth had folded some origami flowers in the ratio 5 : 9. Elizabeth used $\frac{2}{3}$ of her origami flowers for the class decoration. She then had 30 origami flowers left. How many origami flowers did they fold altogether?

Ans: _____

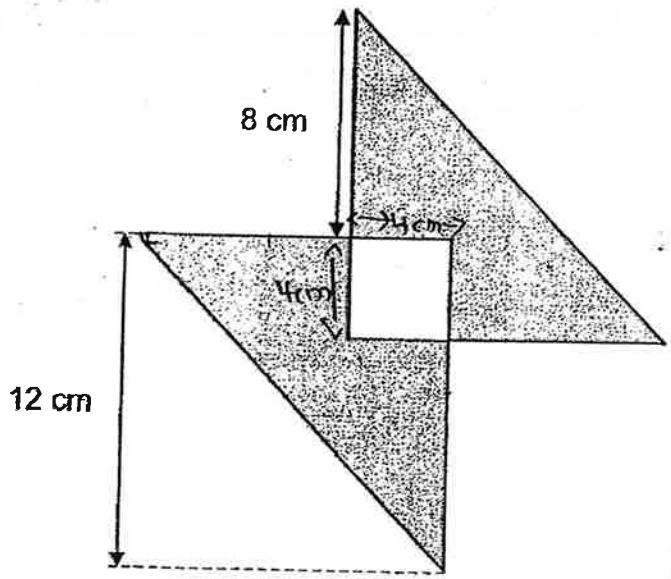
MARKS:

29. Mrs Kani bought 120 apples and 60 pears for an old folks' home. She divided the apples equally among some old folks and had 1 apple left. She also divided the pears equally among them and had 9 pears left. How many old folks were there?

Do not write in this space

Ans: _____

30. The figure below shows two identical right-angled isosceles triangles overlapping to form a square. Find the area of the shaded parts.



Ans: _____ cm^2

End of Paper

MARKS:

Name: _____

Class: Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 6 Mathematics

2019 Mid-Year Assessment

Paper 2

14 May 2019

Total Marks	**55**

_____

Parent's/Guardian's Signature

Time : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet
The use of an approved calculator is expected, where appropriate.

This booklet consists of 14 printed pages.

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

(10 marks)

Do not write in this space

1. Lixin has 4 times as many stamps as Buvan. Buvan has 100 fewer stamps than Helen. Helen has 225 stamps. How many stamps does Lixin have?

Ans : _____

2. A box filled with 20 identical cubes weighs 1.4 kg. The same box filled with 10 identical rods weighs 0.5 kg. The mass of each cube is three times that of each rod. Find the mass of each rod.

Ans : _____ kg

3. The total amount of money Joseph and Mari saved is $\frac{11}{4}$ of the amount of money Mari saved. Mari saved $176. How much more did Joseph save than Mari?

Do not write in this space

Ans : $ _____

4. Vishnu and William spent some time to complete painting a house.
Vishnu spent 3 hours less than $\frac{2}{5}$ of the total time spent by both of them.
William spent 195 hours. What was the total time they spent to complete painting the house?

Ans : _____ h

5. At EzGet Departmental Store, 3 similar towels cost as much as 2 similar water bottles. Each water bottle cost $7 more than each towel. Find the total cost of 1 towel and 1 water bottle.

Do not write in this space

Ans : $ _____

For questions **6** to **17**, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in the brackets ( ) at the end of each question or part-question. (45 marks)

Do not write in this space

6. The total height of Dena, Jolin and Cui Bin are recorded as shown in the table below. Find the average height of the 3 girls.

Name	Total Height (cm)
Dena and Jolin	342
Jolin and Cui Bin	334
Dena and Cui Bin	338

Ans : _____ [3]

7. $\frac{3}{4}$ of Ethan's mass is equal to $\frac{2}{5}$ of Haziq's mass. Haziq weighs 24.5 kg more than Ethan. What is Haziq's mass?

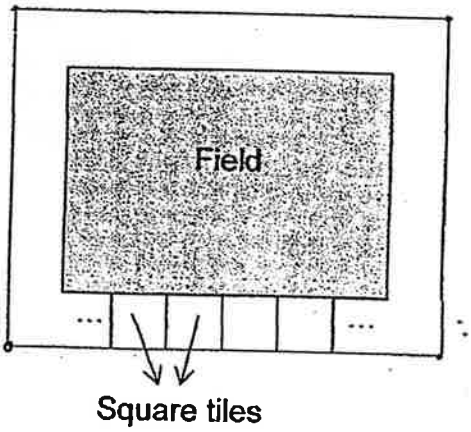
Ans : _____ [3]

8. The perimeter of the field is 8.06 m. The ratio of the breadth of the field to the length of the field is 5 : 8. Some identical square tiles are used to make a pathway around the field.

Do not write in this space

(a) What is the smallest number of square tiles needed to make the pathway around the field?

(b) Find the length of each square tile.



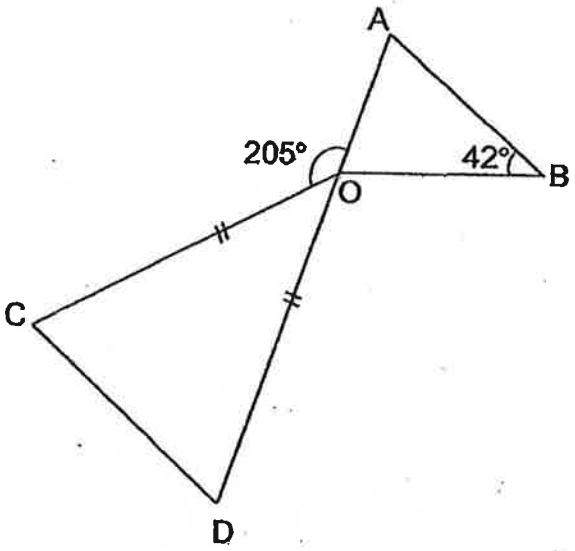
Ans : (a) _____ [1]

(b) _____ [2]

9. After a discount of 15%, the price of a ferry ticket is $40.80. Senior citizens are given a further discount of $6. What is the total amount of discount given to the senior citizens for each ferry ticket?

Ans : _____ [3]

10. The figure below is made up of 2 isosceles triangles, AOB and COD. AOD is a straight line. $\angle COB = 205°$. Find $\angle OCD$.

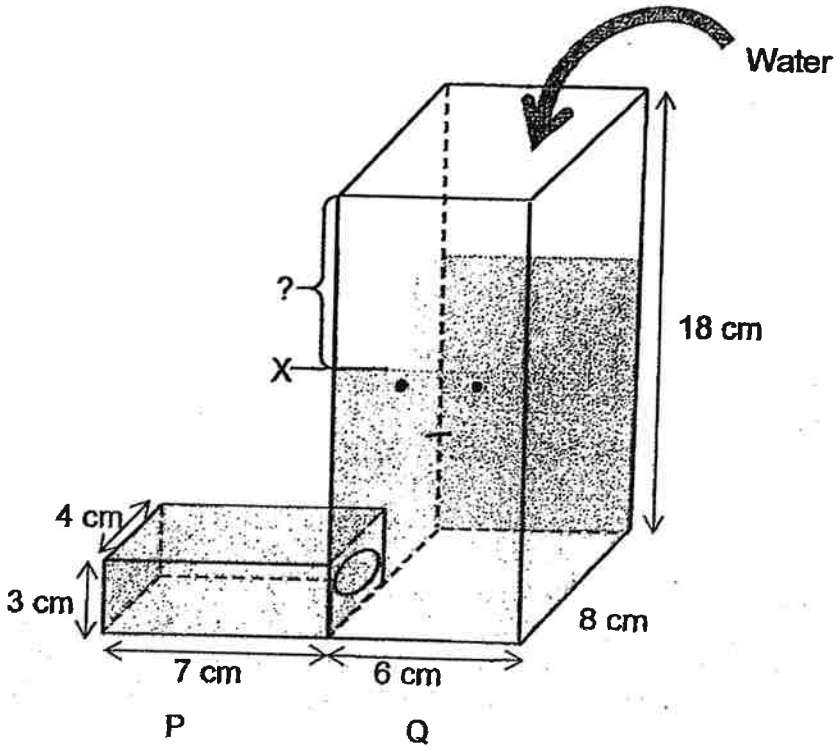


Do not write in this space

Ans : _____ [3]

11. The container below is made up of 2 cuboids P and Q. The opening of Cuboid P is attached to the side of Cuboid Q. 660 ml of water was poured into the container, filling Cuboid P completely first. The water reached Point X as shown in the figure below. How much more water was needed to fill Cuboid Q to the brim?

Do not write in this space



Ans : _____ [3]

12. Suriana bought $4b$ kg of durians. She ate 3 kg of durians and gave b kg of durians to her cousins. Then her sisters ate half of the remaining durians.

(a) Suriana paid \$52 for all the durians. If $b = 2$, what was the cost of 1 kg of durians?

(b) What was the total mass of durians Suriana had left? Express your answer in terms of b.

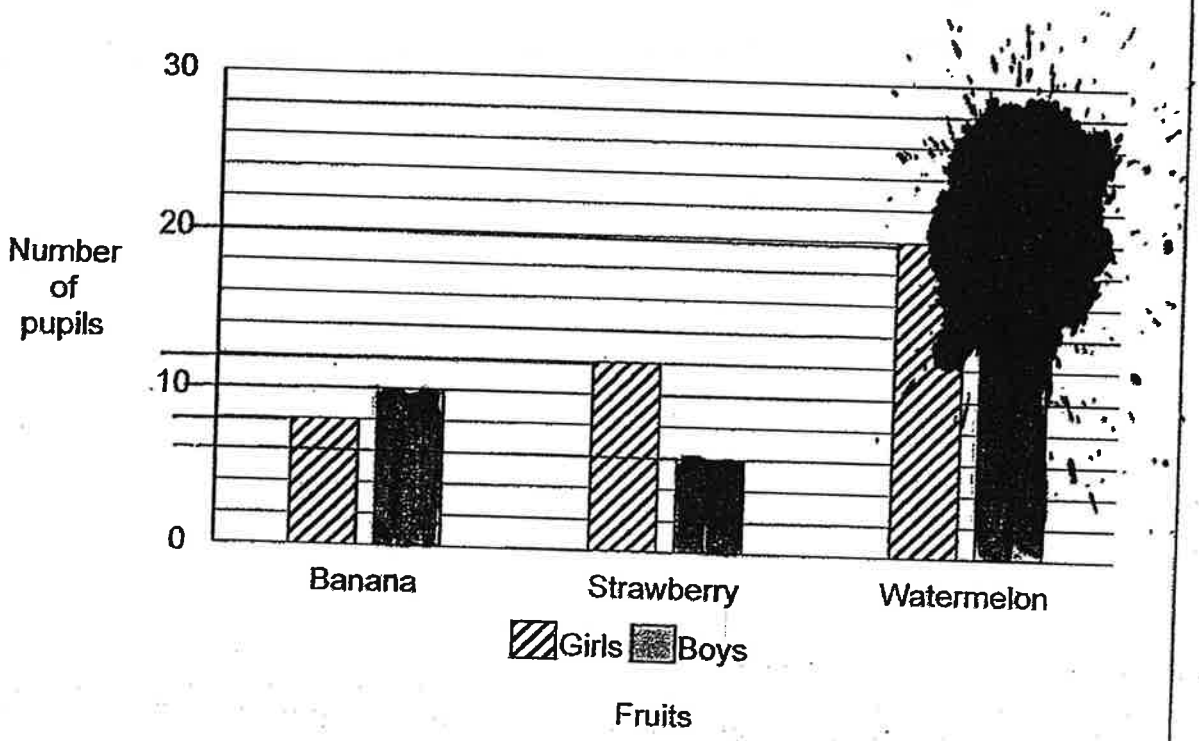
Do not write in this space

Ans : (a) _____ [2]

(b) _____ [2]

13. Mrs Wong asked each child at a party to choose only one fruit that they liked. The table below shows their choices. However, an ink spot covered the number of boys who liked watermelon.

Do not write in this space.



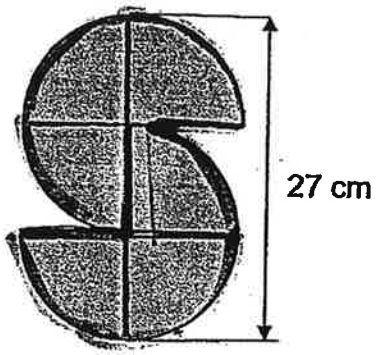
(a) Mrs Wong remembered that the number of boys who chose watermelon was the same as the total number of children who chose strawberry. Find the total number of boys at the party.

(b) What percentage of the children chose bananas? Give your answer correct to 2 decimal places.

Ans : (a) _____ [2]

(b) _____ [2]

14. The figure below is made up of 6 identical quarter circles. The height of the figure is 27 cm.



(a) Find the perimeter of the figure.
(b) Find the area of the figure.
Take $\pi = 3.14$

Do not write in this space

Ans : (a) _____ [2]

(b) _____ [2]

15. At Amaze Arcade, for every 10 game sessions played, a discount of $5 was given. Hazel and Marcus paid a total of $100 and received a change of $6 at the end of their game sessions. They played an equal number of games. Each game session cost $4. How many game sessions did each of them play?

Do not write in this space

Ans : _____ [5]

16. Mrs Chai sold $\frac{3}{8}$ of the total number of tables and chairs in her shop. The price of a chair is $\frac{2}{7}$ of the price of a table. The table costs $125 more than the chair.

Mrs Chai collected $13 800 from the sales. The number of tables sold was $\frac{4}{9}$ of the number of chairs sold.

(a) How much did each table cost?
(b) How many tables did she sell?
(c) Find the total number of tables and chairs in the shop at first.

Do not write in this space

Ans : (a) _____ [1]

(b) _____ [3]

(c) _____ [1]

17. At first, the ratio of the number of marbles in Bag A to the number of marbles in Bag B was 4 : 5. After Zachary took out 16 marbles from Bag A and took out 30 marbles from Bag B, the ratio of the number of marbles in Bag A to the number of marbles in Bag B was 8 : 9.

(a) How many marbles were there in Bag B at first?

(b) How many marbles were there altogether in the end?

Do not write in this space

Ans : (a) _____ [3]

(b) _____ [2]

End of Paper

ANSWER KEY

YEAR : 2019
LEVEL : PRIMARY 6
SCHOOL : CHIJ ST NICHOLAS GIRLS' SCHOOL PRI
SUBJECT : MATHEMATICS
TERM : MID-YEAR

PAPER ONE

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

Q16) $10\frac{3}{9}$

Q17) $\frac{1}{14}$

Q18) 3680

Q19) 35

Q20) 230%

Q21) 8416

Q22) 37.5%

Q23) 1230

Q24) 24°

Q25) 8

Q26) False, False

Q27) 975g

Q28) 140

Q29) 17

Q30) 112cm^2

PAPER TWO

Q1) 225 – 100 = 125
125 x 4 = <u>500</u>

Q2) 1.4 – 0.5 = 0.9
50 units → 0.9
1 unit → 0.9 ÷50 = <u>0.018 kg</u>

Q3) J + M : M : J
11 : 4 : 7
4 units → 176
1 unit → 44
7 – 4 = 3
3 units → 44 x 3 = <u>$132</u>

Q4) 195 – 3 = 192
3 units → 192
1 unit → 192 ÷ 3 = 64
5 units → 64 x 5 = <u>320</u>

Q5) 7 x 2 = 14
14 x 2 = 28
28 + 7 = <u>$35</u>

Q6) 342 + 334 + 338 = 1014
1014 ÷ 2 = 507
507 ÷ 3 = <u>169cm</u>

Q7) 2 x 4 = 8
3 x 5 = 15
15 – 8 = 7
7 units → 24.5
1 unit → 24.5 ÷ 7 = 3.5
15 units → 3.5 x 15 = <u>52.5kg</u>

Q8a) B : L
5 : 8

(5 x2) + (8 x 2) = 26
26 + 4 = <u>30</u>

Q8b) 8.06 ÷ 26 = <u>0.31m</u>

Q9) 40.80 – 6 = 34.80
(40.80 ÷ 85) x 15 = 7.20
7.20 + 6 = <u>$13.20</u>

Q10) 180 – 42 = 138
138 ÷ 2 = 69
180 – 69 = 111
360 – 205 – 111 = 44
180 – 44 = 136
136 ÷ 2 = 68°

Q11) P: 4 x 3 x 7 = 84
Q: 660 – 84 = 576 (filled)

Capacity: $6 \times 8 \times 18 = 864$

Difference: $864 - 576 = \underline{288\text{cm}^3}$

Q12a) b → 2

$4b \rightarrow 2 \times 4 = 8$

$52 \div 8 = \underline{\$6.50}$

Q12b) $(4b - 3 - b) \div 2 = \frac{4b-3-b}{2}$

$= \frac{3b-3}{2}$

Ans: $(\frac{3b-3}{2})$ kg

Q13a) total strawberries: $12 + 6 = 18$

total boys: $10 + 6 + 18 = \underline{34 \text{ boys}}$

Q13b) total children: $8 + 10 + 12 + 6 + 20 + 8 = 74$

total bananas: $10 + 8 = 18$

$\frac{18}{74} \times 100 \approx \underline{24.32\%}$

Q14a) $27 \div 3 = 9$ (radius)

$9 \times 2 = 18$ (diameter)

$\pi d \times \frac{1}{4} \times 6 = 3.14 \times 18 \times \frac{1}{4} \times 6$

$= 84.78$

$9 \times 9 = 18$

$84.78 + 18 = \underline{102.78\text{cm}}$

Q14b) $\pi r^2 \times \frac{1}{4} \times 6 = 3.14 \times 9 \times 9 \times \frac{1}{4} \times 6$

$= \underline{381.51\text{cm}^2}$

Q15) 1 session → 4

10 sessions → (4 x 10) – 5 = 35

100 – 6 = 94

94 ÷ 35 = 2 R24

10 x 2 = 20 sessions

24 ÷ 4 = 6

20 + 6 = 26

26 ÷ 2 = <u>13 sessions</u>

Q16a) 125 ÷ 5 = 25

25 x 7 = <u>$175</u>

Q16b) chair → 2 x 25 = 50

4 tables → 175 x 4 = 700

9 chairs → 50 x 9 = 450

13 800 ÷ (700 + 450) = 12

Tables → 12 x 4 = <u>48</u>

Q16c) Chairs → 12 x 9 = 108

108 + 48 = 156

(156 ÷ 3) x 8 = <u>416</u>

Q17a) 4u = 16 + 8p 5u = 30 + 9p

20u = 80 + 40p 20u = 120 + 36p

80 + 40p (-36p) = 120 + 36p (-36p)

80 + 4p (-80) = 120 (-80)

4p = 40

1p = 10

10 x 9 = 90

90 + 30 = <u>120</u>

Q17b) 8 + 9 = 17

10 x 17 = <u>170</u>

END