Name : _____( )

Class : Primary 6 _____

Primary 6 Mathematics

2017 Continual Assessment One

Paper 1

Booklet A

28 February 2017

15 QUESTIONS
20 MARKS

TOTAL TIME FOR BOOKLET A & B : 50 MINUTES

INSTRUCTIONS TO CANDIDATES
DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.
ANSWER ALL QUESTIONS.
SHADE YOUR ANSWERS IN THE OPTICAL ANSWER SHEET (OAS) PROVIDED.
THE USE OF CALCULATORS IS **NOT** ALLOWED.

This booklet consists of 9 printed pages including the cover page.

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, 4) on the Optical Answer Sheet. (20 marks)

---

1) 5 hundreds, 9 tenths and 3 thousandths is _____.

(1) 590.003

(2) 500.903

(3) 500.390

(4) 500.093

2) Express $\frac{84}{120}$ as a percentage.

(1) 0.07%

(2) 0.7%

(3) 7%

(4) 70%

3) $\frac{3}{4}$ of a cake was divided equally among 6 children. What fraction of the cake did each child get?

(1) $\frac{1}{8}$

(2) $\frac{2}{9}$

(3) $4\frac{1}{2}$

(4) 8

4) Which of the following is likely to be the height of a classroom wall?

(1) 30 cm

(2) 30 m

(3) 3 cm

(4) 3 m

5) Kiera had \$5r. After buying some roast duck meat at \$9 per kilogram, she had \$$r$ left. How many kilograms of roast duck meat did she buy?

(1) $63r$ kg

(2) $36r$ kg

(3) $\frac{6r}{9}$ kg

(4) $\frac{4r}{9}$ kg

6) May's mass is $\frac{5}{9}$ of Kelly's mass. Find the ratio of Kelly's mass to May's mass to the total mass of the two girls.

(1) 9 : 5 : 14

(2) 5 : 9 : 14

(3) 5 : 4 : 9

(4) 4 : 5 : 9

7) There is $\frac{5}{8}$ *l* of lemonade in a bottle. The lemonade is poured equally into some cups. Each cup contains $\frac{1}{5}$ *l* of lemonade. Which of the following number sentences shows the number of cups of lemonade?

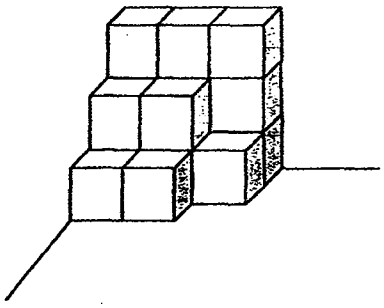
(1) $\frac{8}{5} \times \frac{5}{1}$

(2) $\frac{8}{5} \times \frac{1}{5}$

(3) $\frac{5}{8} \times \frac{5}{1}$

(4) $\frac{5}{8} \times \frac{1}{5}$

8) Felicia stacked some identical cubes in a corner of a room as shown below.



How many cubes are there?

(1) 10

(2) 12

(3) 14

(4) 16

9) A cuboid of height 15 cm has a square base of side 4 cm. Find its volume.

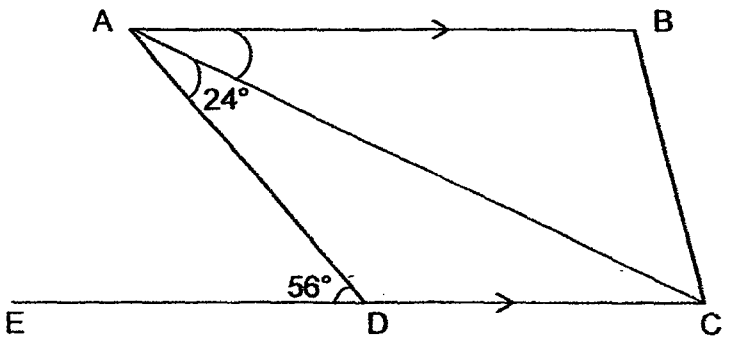
(1) 60 cm^3

(2) 120 cm^3

(3) 240 cm^3

(4) 900 cm^3

10) The figure below shows a trapezium ABCD and EDC is a straight line $\angle DAC = 24°$ and $\angle ADE = 56°$. Find $\angle CAB$.



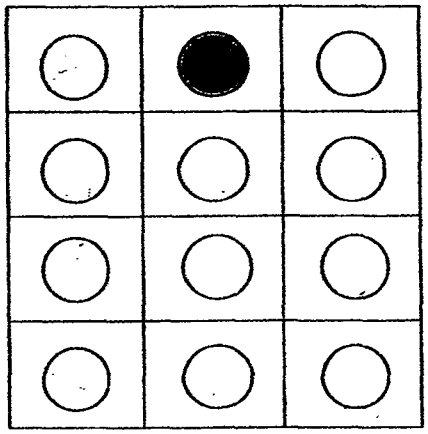
(1) 32°

(2) 34°

(3) 56°

(4) 124°

11) In the figure below, how many more balls must be shaded so that the ratio of the number of unshaded balls to the total number of balls is 2 : 3 ?



(1) 8

(2) 7

(3) 3

(4) 4

12) Pauline wants to build a playground in her courtyard. The area of her courtyard is 145 m^2. She wants to allocate 60% of her courtyard for the playground. What is the area of the courtyard not used for building the playground?

(1) 29 m^2

(2) 58 m^2

(3) 85 m^2

(4) 87 m^2

13) $\frac{3}{5}$ of Nelson's marbles is equal to $\frac{1}{2}$ of Daniel's marbles. Daniel has 72 marbles. How many marbles does Nelson have?

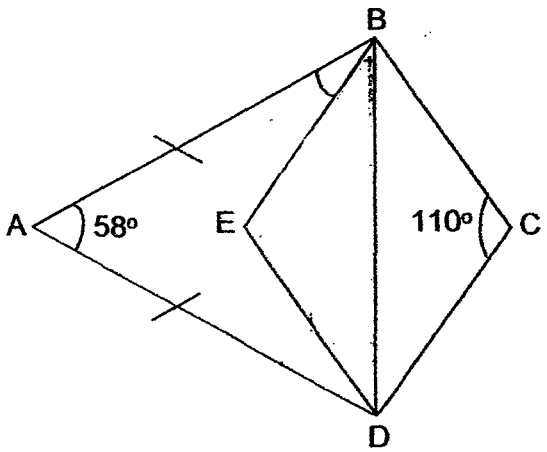
(1) 36

(2) 60

(3) 120

(4) 240

14) In the figure, ABD is an isosceles triangle and BCDE is a rhombus. Find ∠ABE.



(1) 12°

(2) 25°

(3) 26°

(4) 61°

15) Some sweets were given equally to 12 children. Each child ate 2 sweets. The total number of sweets left was the same as the number of sweets 9 children had at first. How many sweets did each child have at first?

(1) 18

(2) 8

(3) 6

(4) 4

End of Booklet A

Name : _____ ( )

Class : Primary 6 _____

Primary 6 Mathematics

2017 Continual Assessment One

Paper 1

Booklet B

28 February 2017

15 questions
20 marks

TOTAL TIME FOR BOOKLET A & B : 50 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 CALCULATORS IS **NOT** ALLOWED.

This booklet consists of 9 printed pages including the cover page.

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)

Do not write in this space.

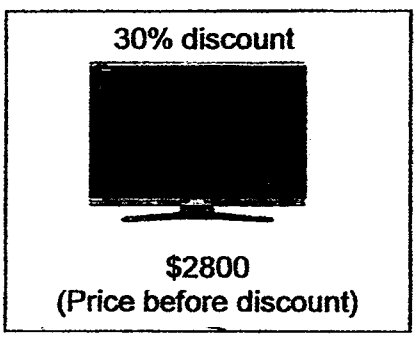
16) Express 5 km 98 m in kilometres.

Ans : _____ km

17) Simplify 17n + 11 - 4n - 6.

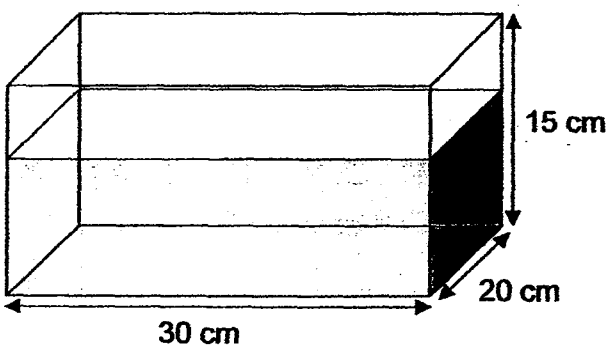
Ans : _____

18) What is the price of the television after the discount?



Ans : $_____

19) A rectangular container measures 30 cm by 20 cm by 15 cm. $\frac{2}{3}$ of the tank is filled with water. How much water is there in the ~~tank~~?



Ans : _____ m*l*

20) Find the value of 2.4 ÷ 600.

Ans : _____

Do not write in this space.

21) Antonio has a 4-l bottle of tomato juice. He drinks $\frac{2}{5}l$ of tomato juice every day. How many days does he take to finish the bottle?

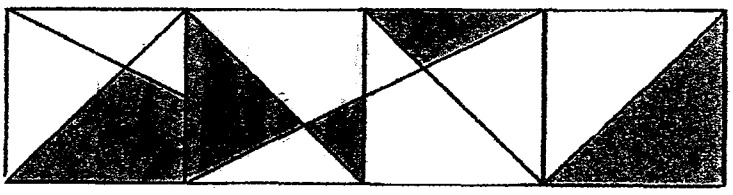
Do not write in this space.

Ans : _____

22) Find the value of $96 \div (17 - 9) + 2 \times 8$.

Ans : _____

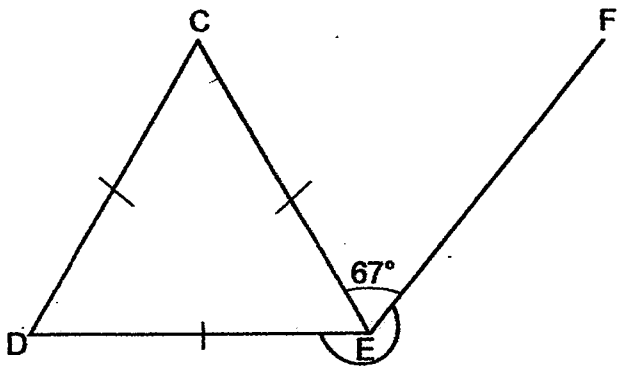
23) The figure below is made up of similar squares. What fraction of the whole figure is shaded? Give your answer in the simplest form.



Ans: _____

Do not write in this space.

24 In the figure below, EF is a straight line. CDE is an equilateral triangle. Find ∠DEF.



Ans : _____°

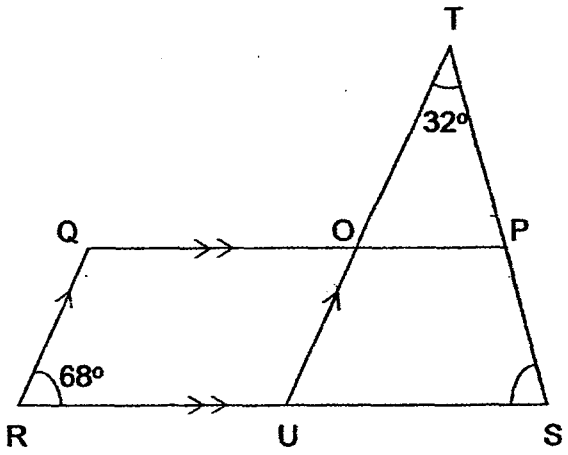
25) Betty had 5 boxes of egg tarts. Each box contained q egg tarts. She gave her two neighbours 6 egg tarts each. How many egg tarts did Betty have in the end? Express your answer in terms of q.

Ans: _____

Questions **26** to **30** 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.

26) PQRS is a trapezium. TOU and TPS are straight lines. QR is parallel to OU. Find ∠PSU.



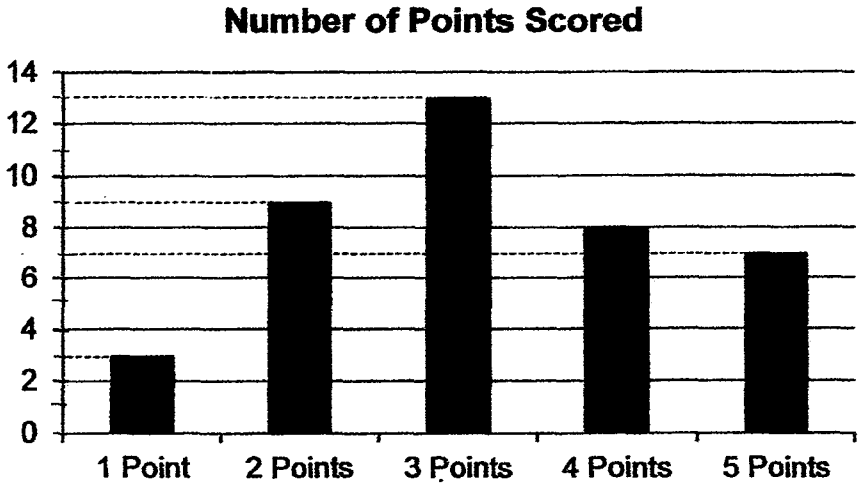
Ans : _____ °

27) Molly paid \$20*y* for 2 cups of coffee and 3 cups of milk.
A cup of coffee cost \$2 more than a cup of milk.
Find the cost of a cup of milk in terms of *y*.

Ans : \$_____

28) The bar graph below shows the number of points scored by a class of students in a spelling quiz. What percentage of the students scored at least 3 points?

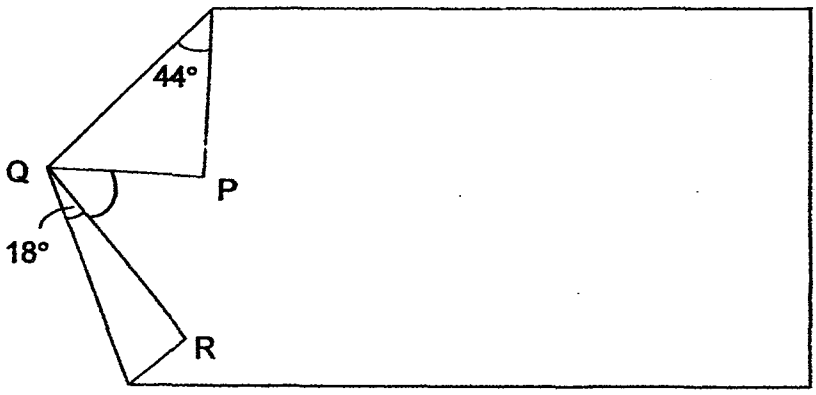
Do not write in this space.



Ans : _____ %

29) In the figure below, a rectangular piece of paper is folded at two of its corners, P and R as shown. Find ∠PQR.

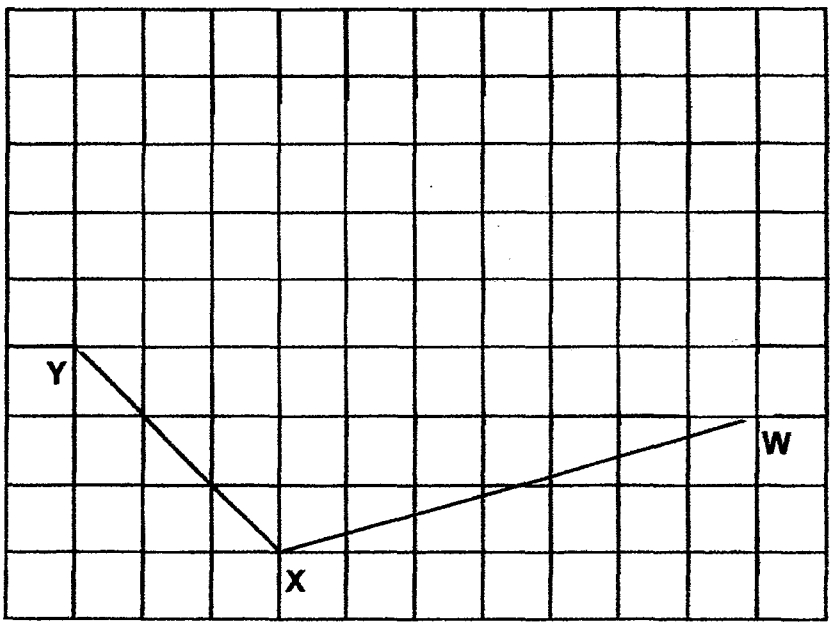
Do not write in this space.



Ans : _____°

30) In the square grid below, WX and XY are straight lines that form two sides of a parallelogram WXYZ. Complete the drawing of the parallelogram WXYZ and label point Z.

Do not write in this space.



End of Paper 1

Name : _____ ( )

Class : Primary 6 _____

Primary 6 Mathematics

2017 Continual Assessment One

Paper 2

28 February 2017

Paper 1	**40**
Paper 2	**60**
Total	**100**

18 QUESTIONS
60 MARKS

TOTAL TIME FOR PAPER 2 : 1 HOUR 40 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 15 printed pages including the cover page.

Questions **1 to 5** carry 2 marks each. Show your working clearly in the space provided 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)

Do not write in this space.

1. Josie and Elly spent 3 h 40 min altogether on a recycling project. 35% of the total time was spent by Elly. How much more time did Josie spend than Elly?

Ans: _____ min

2. Every day, Dorothy drinks $2\frac{1}{5}$ *l* of water and Zane drinks $\frac{9}{10}$ *l* more than her. How much water do they drink altogether in a week? Leave your answer as a mixed number in the simplest form.

Ans: _____ *l*

3. Carol did $9w$ sit-ups. She did 7 fewer sit-ups than Jervin. Aisha did 5 more sit-ups than Jervin. How many sit-ups did Aisha do?

Do not write in this space.

Ans: _____

4. Brandon had a pole measuring 7 m. He painted it red, yellow and green. He painted $1\frac{3}{4}$ m of the pole red. The length of the green part was $\frac{3}{4}$ of the length of the yellow part. What was the length of the pole that was painted green?

Ans: _____ m

5. Leslie used grey and white squares to make the figures below that follow a pattern. The first 4 figures are shown.

Do not write in this space.


Figure 1

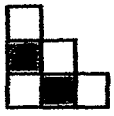


Figure 2

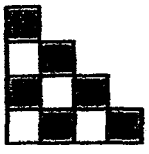


Figure 3

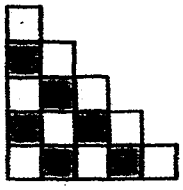


Figure 4

He recorded the number of grey and white squares used in each figure as shown in the table.

Figure	Number of white squares	Number of grey squares	Total number of squares
1	1	2	3
2	4	2	6
3	4	6	10
4	9	6	15
	. . .	. . .	

(a) How many grey squares were there in Figure 6?

(b) What is the total number of squares in Figure 8?

Ans: (a) _____

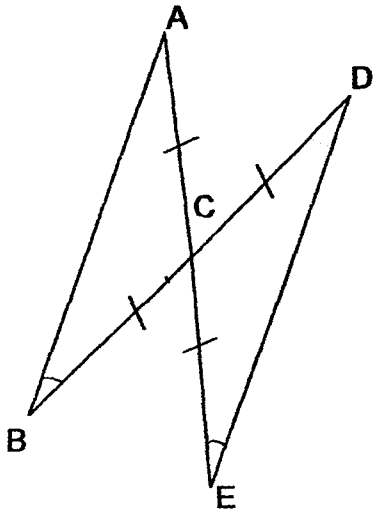
(b) _____

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

[50 marks]

Do not write in this space.

6. BD and AE are straight lines. AC = CB = CD = CE. ∠BCA is twice the size of ∠ACD. Find ∠CBA.



Ans: _____ [3]

7. A cupcake costs $1.50. For every 4 cupcakes bought, Xavier can get 1 cupcake free. What is the greatest number of cupcakes that he can get with $40?

Do not write in this space.

Ans: _____ [3]

8. Some notepads were distributed equally among 20 staff. 8 of them passed $\frac{1}{3}$ of their total share to the remaining staff. The remaining staff received 10 more notepads each. How many notepads were distributed among the 20 staff at first?

Ans: _____ [3]

9. 55% of the employees in Mighty Talent Company are females. 40% of the males are taking part in a charity show. All the females are also taking part in the charity show. What percentage of the employees are taking part in the charity show?

Do not write in this space.

Ans: _____ [3]

10. The number of cookies Karina baked to the number of cookies Hana baked was 5 : 9. Tiffany baked twice as many cookies as Karina. The total number of cookies baked by the 3 girls was 504. How many cookies did Tiffany and Hana bake altogether?

Ans: _____ [3]

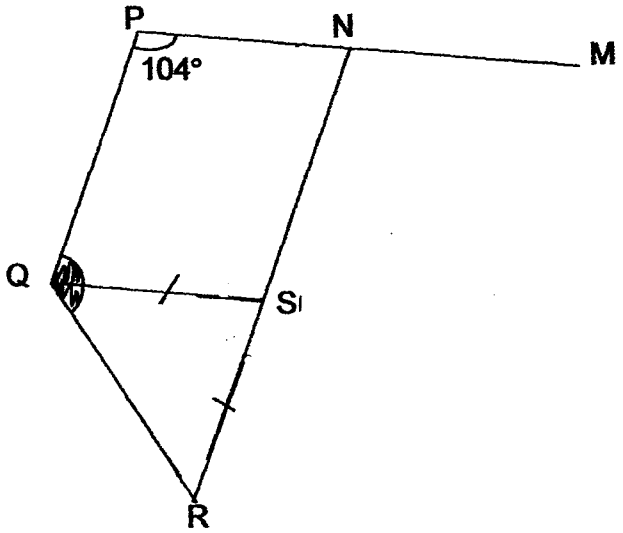
11. Earl spent \$1540 on a sofa. He spent $\frac{1}{5}$ of his remaining money on a vase. He then had $\frac{1}{4}$ of his original sum of money left. How much money did Earl have at first?

Do not write in this space.

Ans: _____ [3]

12. In the figure below, NR and PM are straight lines. QRS is an isosceles triangle and QPNS is a parallelogram. Find ∠PQR.

Do not write in this space.



Ans : _____ [4]

13. A tailor charges $7.80 for every piece of shirt altered and $8.50 for every pair of pants altered. Last month, the tailor collected a total of $8103 from altering shirts and pants. For every 27 pieces of clothes altered, 15 of them were shirts and the rest were pants. What was the total number of pieces of shirts and pants altered?

Do not write in this space.

Ans: _____ [4]

14. Mrs Harry and her 3 children went to Bouncy Park. They stayed there from 1430 to 1715. The table below shows the charges. How much money did they spend at Bouncy Park altogether?

Do not write in this space.

	Adult	Child
1st hour	$5.50 per hour	$3 per hour
Every additional $\frac{1}{2}$ hour or part thereof	$3	$1.90

Ans: _____ [4]

15. Jarrod poured 30.8 *l* of water into 2 empty containers, Container X and Container Y, without overflowing. Only Container X was completely filled. It contained 10 times as much water as Container Y.

(a) How many litres of water did Jarrod pour into Container Y?

(b) The ratio of the total capacity of Container X to the total capacity of Container Y was 5 : 8. How much more water was needed to fill Container Y completely?

Do not write in this space.

Ans : (a) _____ [2]

(b) _____ [3]

16. A chef had some potatoes. He used $\frac{2}{7}$ of them on Wednesday and $\frac{1}{9}$ of the rest on Thursday. He then bought another 161 potatoes. In the end, he had as many potatoes as he had at first. How many potatoes did he have at first?

Do not write in this space.

Ans : _____ [5]

17. William had $\$g$ more than Sean. When Sean gave William \$30, William would have 3 times as much money as Sean.

(a) How much more money did William have than Sean in the end? Express your answer in terms of g in the simplest form.

(b) If g = \$90, how much money did Sean and William each have at first?

Do not write in this space.

Ans : (a) _____ [2]

(b) Sean: _____

William: _____ [3]

18. Tammy collected a total number of 1792 coins and dollar notes. The ratio of the number of coins to the number of dollar notes was 5 : 9.

(a) How many coins were there?

(b) The ratio of the number of 20¢ coins to the number of 50¢ coins to the number of $1 coins was 5 : 3 : 2. What was the total value of the coins that Tammy collected?

Do not write in this space.

Ans : (a) _____ [1]

(b) _____ [4]

End of Paper 2

EXAM PAPER 2017 **28 February 2017**
LEVEL : PRIMARY 6
SCHOOL : CHIJ ST NICHOLAS GIRL'S SCHOOL (PRIMARY)
SUBJECT : MATHEMATICS
TERM : CONTINUAL ASSESSMENT 1

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

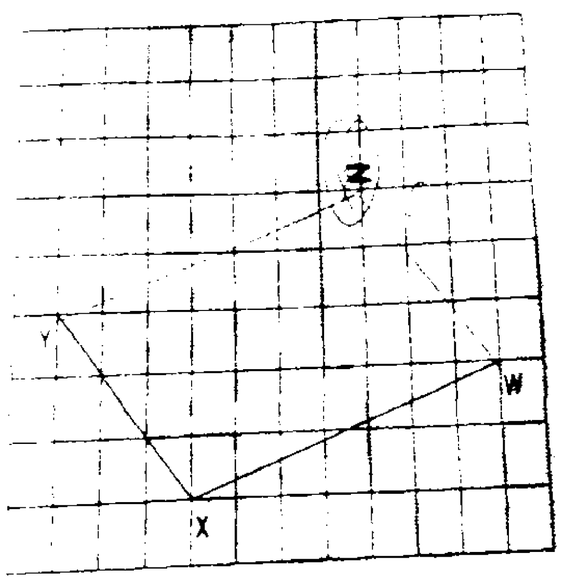
Q16. 5.098 **Q17. 13n + 5** **Q18. 1960** **Q19. 60000**

Q20. 0.004 **Q21. 10 days** **Q22. 28** **Q23. 3/8**

Q24. 233 **Q25. (5q – 12) egg tarts** **Q26. 80**

Q27. $\frac{20y-4}{5}$ **Q28. 70** **Q29. 52**

Q30.



PAPER 2

Q1. 3h 40 min = 220min
100 – 35 – 35 = 30
220 X 30/100 = 66 **Answer: 66min**

Q2. 2.2 + 3.1 = 5.3
5.3 X 7 =37.1 **Answer: 37.1L**

Q3. 9w + 7 + 5 = (9w + 12) **Answer: (9w + 12) sit ups**

Q4. 7 – 1.75 = 5.25
3 + 4 = 7
5.25 ÷7 = 0.75
0.75 X 3 = 2.25 **Answer: 2.25**

Q5a) 12 b) 15 + 6 + 7 + 8 + 9 = 45 Answer: a) 12 b) 45

Q6. 180/3 = 60
60 X 2 = 120
180 -60 = 120
180 – 120 = 60
60/2 = 30

Q7. 1.50 X 4 = 6
10/ 6 ≈ 6.67 (6 sets of 5)
6 X 6 = 36
40 – 36 = 4
1.50 X 2 = 3
30 + 2 = 32 **Answer: 32 cupcakes**

Q8. 12 X 10 = 120
20 X 3 = 60
8/60 = 120
1/60 = 15
15 X 60 = 900 **Answer: 900 notepads**

Q9. Female = 55 Male = 100 – 45 = 155
40/100 X 45/100 = 18/100
18/100 + 55/100 = 73/100 **Answer: 73% of the employees**

Q10. 5 X 2 = 10
10 + 5 + 9 = 24
1u = 504 ÷ 24 = 21
10 + 9 = 19
19 X 21 = 399 **Answer: 399 cookies**

Q11. 4/4 → 4u X 4 = 16u
¼ → 4/5
4/16 → 4/5 Total: 16
4/16 + 1/16 = 5/16
16 – 5 = 11
1540 ÷ 11 = 140
140 X 16 = 2240 Answer: $2240

Q12. 30 -104 -104 = 152
152 ÷ 2 = 76
180 - 104 = 76
180 – 76 = 104
104/2 = 52
52 + 76 = 128 Answer: 128°

Q13. (7.80 X 15) + (8.50 X 12) = 219
8103/219 = 37
37 X 27 = 999 **Answer: 999 pieces**

Q14. 3 X 3 = 9
1.90 X 4 X 3 = 22
9 + 22.80 = 31.80
1st hour → 5.50
3 X 4 = 12
5.50 + 12 = 17.50
17.50 + 31.80 = 49.30 **Answer: $49.30**

Q15. 10 + 1 = 11
30.8/11 = 2.8
2.8 X 10 = 28
28/5 = 5.6
5.6 X 8 = 44.8
44.8 -2.8 = 42 **Answer: a) 2.8L b) 42L**

Q16. 1 - 2/7 = 5/7
1/9 X 5/7 = 5/63
2/7 + 5/63 = 23/63
23/63 → 161
1/63 = 7
1 → 441 **Answer: 441 potatoes**

Q17. 30 + 30 + g = 60 + g
2u → 30 + 90 + 30 = 150
1u = 75
75 + 30 = 105
75 + 30 + 90 = 195 **Answer: a) $(60 + g) b) Sean: $105 William: $195**

Q18. 9 + 5 = 14
1792/14 = 128
128 X 5 = 640
5 + 3 + 2 = 10
1u → 64 X 5 = 320
64 X 5 = 320
320 X 0.2 = 64
0.50 → 64 X 3 = 192
192 X 0.50 = 96
64 X 2 = 128
128 + 64 + 96 = 288 **Answer: a) 640 b) $288**