GUYANA
MINISTRY OF EDUCATION
NATIONAL GRADE SIX ASSESSMENT
2013

MATHEMATICS
PAPER 1

TIME: 1 hour   10 minutes

READ THESE INSTRUCTIONS CAREFULLY BEFORE YOU ATTEMPT TO ANSWER THE QUESTIONS.

1. **WRITE YOUR CANDIDATE NUMBER ON THE ANSWER SHEET AND UNDERLINE THE SUBJECT.**

2. This test contains 40 questions. You are required to answer **ALL** questions. Four responses are given for each question. The responses are **A, B, C** and **D**. Only **ONE** response is correct.

3. If you are not sure of the answer to a question, then choose the one which you think is **BEST**. On your answer sheet, shade the letter you have chosen.

4. **BE SURE THAT THE QUESTION NUMBER IN THE BOOKLET IS THE SAME AS THE ONE YOU HAVE USED ON YOUR ANSWER SHEET.**

    Here is an example done for you.

    1.   The sum of 4 and 5 is   **ANSWER SHEET**

    (A)   1.   (B)   9.   **1.   A   ●   C   D**

    (C)   20.   (D)   45.

    Note: The letter **B** is shaded on the answer sheet because **9**, the correct answer, is next to **B**.

5. If you make a mistake, erase the shaded letter cleanly, then shade the letter next to the answer you have now chosen.

6. **REMEMBER**, each answer **MUST** only be shown by the shading on your **Answer Sheet.**

7. Remember only **ONE** answer must be provided for each question.

    DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

1. Which is an **even** number?

    (A)   76 818   (B)   83 059

    (C)   88 967   (D)   99 701

2. What is the value of **6** in 25 673?

    (A)   60   (B)   600

    (C)   6000   (D)   60 000

3. Which shows the operation of division?

    (A)   Include 6 more objects   (B)   Decrease 15 by 6

    (C)   Make 6 greater by 15   (D)   Share 15 among 6

4. The sum of 10 and 407 is

    (A)   470   (B)   417

    (C)   397   (D)   307


Study **Figure 1**, then answer **questions 5 and 6**.
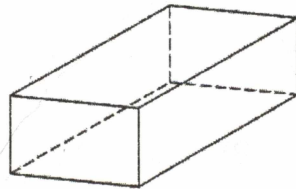
Figure 1
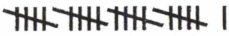
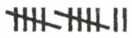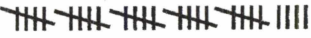
5. The figure is called a

    (A)   cube.   (B)   cylinder.

    (C)   cuboid.   (D)   sphere.

6. The figure has _____ sides.

    (A)   4   (B)   5

    (C)   6   (D)   8

7. A cricketer who scores one run less than a century has made ____ runs.

    (A)   19   (B)   99

    (C)   101   (D)   111

8. The unit used to measure the mass of heavy objects is

    (A)   degree   (B)   kilogramme

    (C)   kilometre   (D)   litre

9. Which is the symbol for 'not a member of'?

    (A) $\in$ (B) $\notin$

    (C) $\cap$ (D)   { }

10. Which pair are equal sets?

    (A)   {3, 7, 10, 8}   {6, 17, 13}

    (B)   {6, 10, 12, 5}   {60, 6, 10, 5}

    (C)   {3, 6, 8, 7}   {7, 3, 8, 6}

    (D)   {6, 0, 10, 7}   {5, 7, 0, 6}

11. Which fraction represents 1%?

    (A) $\frac{1}{10}$ (B) $\frac{1}{100}$

    (C) $\frac{1}{1000}$ (D) $\frac{1}{10000}$

Figure 2 shows the favourite fruits of children in Grade Six. Study it, then answer **questions 12 and 13**.

Bananas	👤👤👤👤👤👤👤👤
Pineapples	👤👤👤👤👤👤👤👤👤👤👤👤
Cherries	👤👤👤👤👤👤👤👤
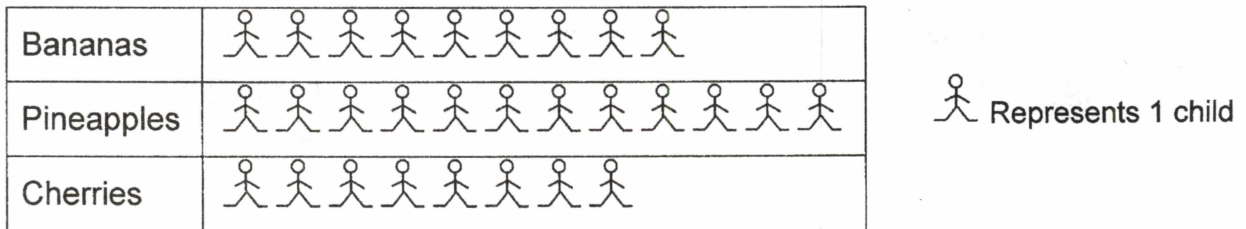
👤 Represents 1 child

Figure 2

12. The graph in **Figure 2** is called a

    (A) bar graph.   (B) line graph.

    (C) pictograph.   (D) pie chart.

13. Which tally marks represent the number of children who like **pineapples and cherries**?

    (A) ⅲⅲ ⅲⅲ ⅲⅲ ⅲⅲ   (B) ⅲⅲ ⅲⅲ ⅲⅲ ⅲⅲ I

    (C) ⅲⅲ ⅲⅲ II   (D) ⅲⅲ ⅲⅲ ⅲⅲ ⅲⅲ ⅲⅲ IIII

14. The number that comes before 7010 is

    (A) 7000   (B) 7009

    (C) 7011   (D) 7090

15. The expanded form for 9074 is

    (A) 90 + 700 + 4   (B) 900 + 70 + 4

    (C) 9000 + 7 + 4   (D) 9000 + 70 + 4

16. $1.900 - 0.149 =$

    (A) 0.751   (B) 1.751

    (C) 1.851   (D) 1.811

4

17. $60.5 \div 100 =$

    (A)   60 500   (B)   6050

    (C)   6.05   (D)   0.605

18. What is the **LCM** for 12, 18 and 24?

    (A)   6   (B)   24

    (C)   54   (D)   72
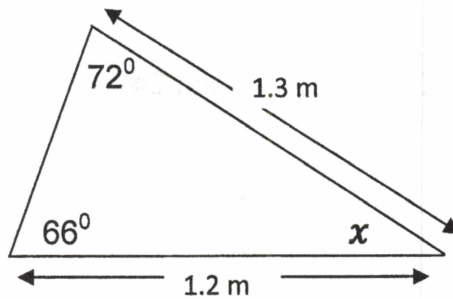

Study **Figure 3**, then answer **question 19**.
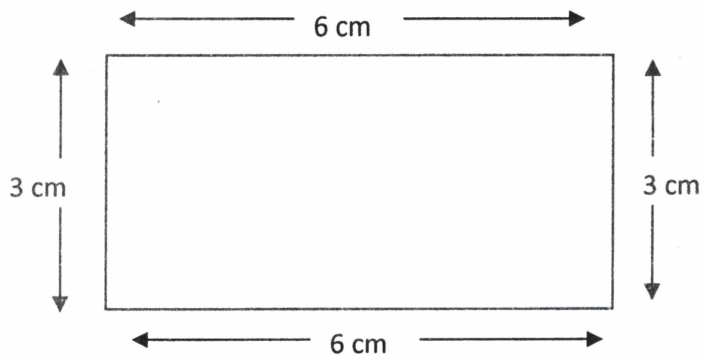
Figure 3

19. How many lines of symmetry can be drawn on **Figure 3** above?

   (A)   2   (B)   4

    (C)   6   (D)   8

Study **Figure 4**, then answer **questions 20 and 21**.

Figure 4

20. The value of the angle marked x in **Figure 4** is

    (A) 138^0 (B) 72^0
    (C) 66^0 (D) 42^0

21. If the **perimeter** of **Figure 4** is 3 m, the length of the third side is

    (A) 3.5   (B) 2.5
    (C) 0.5   (D) 0.1

22. One face of a cube has a surface area of 12 cm². What is the **total** surface area, in cm², of the cube?

    (A) 72   (B) 48
    (C) 24   (D) 12

23. How many subsets can be formed from the set {x, y, z}?

    (A) 2   (B) 4
    (C) 6   (D) 8

6

Study the Venn diagram in **Figure 5**, then answer **questions 24 and 25**.
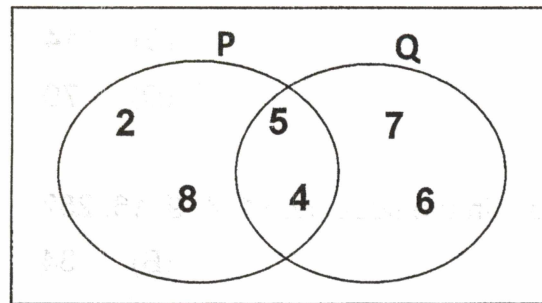
Figure 5

24. The members in set P **only** are

(A) 2, 8   (B) 4, 5

(C) 6, 7   (D) 2, 5

25. What is the sum of the members in the Venn diagram?

(A) 19   (B) 22

(C) 23   (D) 32

26. What is 20% of 900?

(A) 450   (B) 225

(C) 180   (D) 80

27. A pair of shoes which costs $6000 was decreased by 40%. What is the new price
of the pair of shoes?

(A) $2400   (B) $3600

(C) $5960   (D) $8400

28. 12 : 8 = 36 : x. What is the value of x?

(A) 8   (B) 12

(C) 24   (D) 30

29. The average of six numbers is 14. If the total for **five** of the numbers is 70, what is the sixth number?

   (A)   12   (B)   14

   (C)   35   (D)   70

30. What is the next number in the sequence 1, 4, 9, 16, 25?

   (A)   33   (B)   34

   (C)   35   (D)   36

31. The **largest** number is

   (A)   8.893   (B)   8.889

   (C)   8.763   (D)   8.762

32. **9, 12, and 15** is to **3** as **15, 20 and 35** is to

   (A)   2   (B)   5

   (C)   7   (D)   10

Study **Figure 6**, then answer **question 33**.

Figure 6

33. The value of **y** is

   (A) 20^0 (B) 117^0

   (C) 120^0 (D) 243^0

34. When Lalita poured 3 litres of water into an empty upright cylindrical metal drum, 1 cm of the bottom was covered. If the drum is 1 m high, what is the capacity of the drum in litres?

   (A)   3   (B)   10

   (C)   30   (D)   300

35. Fazil began doing his homework assignments at 17:05 h and finished at 19:35 h. The number of minutes Fazil took to complete his homework assignments was

(A)   150   (B)   120

(C)   90   (D)   65

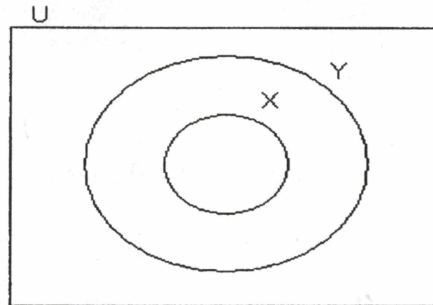
Study the **Venn Diagram** in **Figure 7** below carefully, then answer **question 36**.


Figure 7

36. Which statement about the Venn diagram is **correct**?

(A)   X is a subset of Y   (B)   Y is a subset of X

(C)   U is a subset of X   (D)   U is a subset of Y

37. Arrange the quantities $\frac{7}{10}$, 0.8 and 8% from **greatest to least**?

(A)   8%, 0.8, $\frac{7}{10}$ (B) $\frac{7}{10}$, 0.8, 8%

(C)   0.8, $\frac{7}{10}$, 8%   (D)   0.8, 8%, $\frac{7}{10}$

38. The cost of a cell phone was reduced from $12 000 to $9600. What was the percent decrease in the price of the cell phone?

(A)   10%   (B)   15%

(C)   20%   (D)   25%

9

The graph below shows the children who visited their favourite places during the vacation. Study it, then answer **questions 39 and 40.**
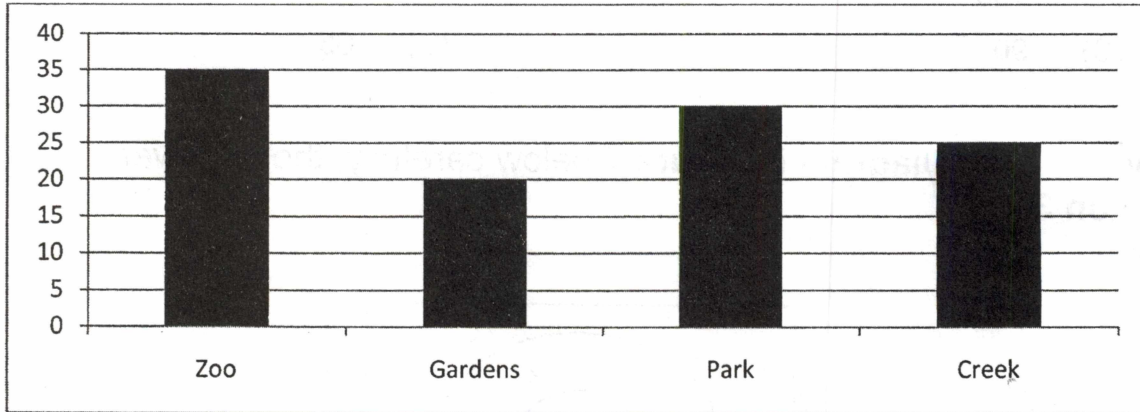
Favourite Places

39. How many children visited the **zoo, park and creek**?

    (A)   25   (B)   30

    (C)   35   (D)   90

40. How many **more** children visited the zoo than the park?

    (A)   5   (B)   15

    (C)   20   (D)   35

END OF TEST

M/II

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NATIONAL GRADE SIX ASSESSMENT
2013

MATHEMATICS

PAPER 2

Reading Time: 10 minutes

Writing Time: 45 minutes

READ THESE INSTRUCTIONS CAREFULLY BEFORE YOU ATTEMPT TO ANSWER THE QUESTIONS.

1.   **WRITE YOUR CANDIDATE NUMBER CLEARLY ON EACH PAGE.**

2.   This paper contains **SIX** questions. You are required to answer **QUESTION ONE** and **THREE** others. **EACH** question is worth **5** marks.

   Note: You must answer ONLY FOUR questions.

   Be sure to answer **FULLY** the **FOUR** questions.

3.   Write the answer in the space provided in this booklet.

4.   Answers **MUST** be written in complete sentences where possible.

5.   Each step of your work **MUST** be **CLEARLY** shown in this booklet.

6.   If you have to erase, do so cleanly.

7.   Look over your work when you have finished.

8.   **DO NOT** take away any part of this booklet.

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

1.   (a)   Divide 4.8 by 1.2.   (2 marks)

       (b)   Find the value of 68 × 2.4. Round your answer to the nearest whole number.   (3 marks)

Total (5 marks)

2.   (a)   The length of a ribbon is $\frac{4}{5}$ metre. How many $\frac{1}{5}$ metre pieces can be cut from the ribbon?

(2 marks)

(b)   Five packets of parboiled rice cost $4280. How much will 25 packets cost?

(3 marks)

Total (5 marks)

3. A farmer had 40 tomatoes in a basket. 18 tomatoes were green and the rest were red.

    (a)   (i)   How many tomatoes were red?   (1 mark)

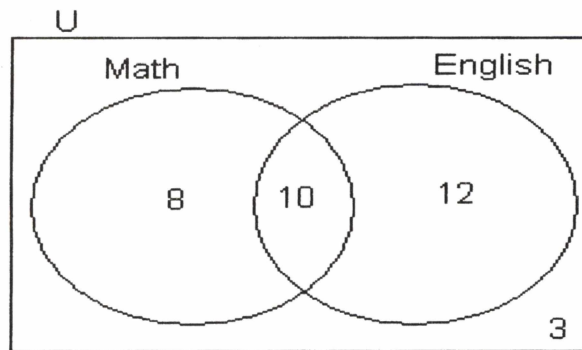   (ii)   What fraction of the tomatoes was red?   (1 mark)

    (b)   (i)   What is the ratio of red tomatoes to green tomatoes?   (2 marks)

            (ii)   Write your ratio in its simplest form.   (1 mark)

Total (5 marks)

The Venn Diagram in **Figure 1** shows the number of children in Grade 5. Study the diagram, then answer **question 4**.
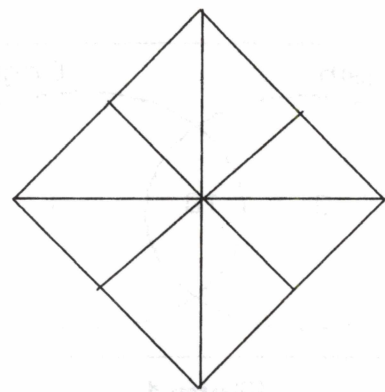
U

Math   English

8   10   12

3

Figure 1

4.   (a)   How many children like **Mathematics and English**?   (1 mark)

(b)   How many children like **Mathematics only**?   (1 mark)

(c)   How many children **do not** like **Mathematics and English**?   (1 mark)

(d)   How many children are in Grade 5?   (2 marks)

Total (5 marks)

Study **Figure 2**, then answer **question 5**.

Figure 2

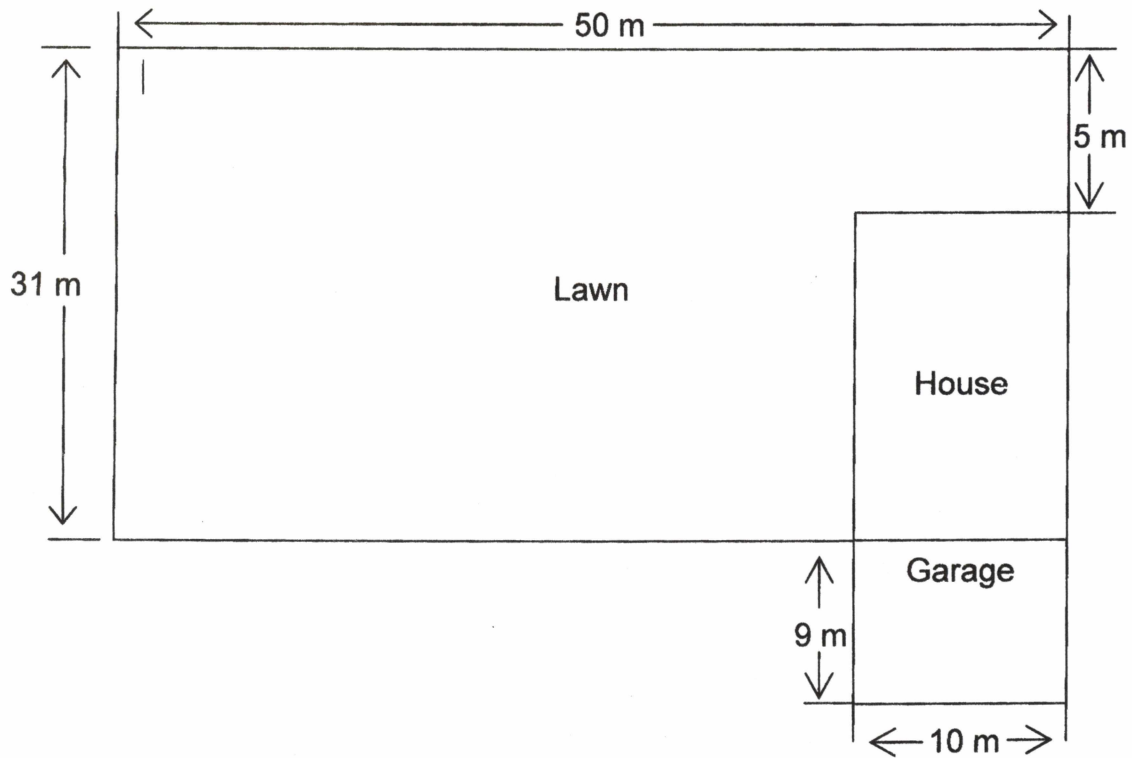5.   (a)   How many triangles are there in the figure?   (3 marks)

     (b)   How many lines of symmetry are there on the figure?   (2 marks)

                                                           Total (5 marks)

Study the diagram of a house, garage and lawn shown in **Figure 3** carefully, then answer **question 6**.

Figure 3

6. (a) Find the area of the **house and garage**. (3 marks)

   (b) Find the perimeter of the **lawn**. (2 marks)

Total (5 marks)

END OF TEST