TEST CODE 09634010

FORM TP 2024392

GUYANA
MINISTRY OF EDUCATION
NATIONAL GRADE SIX ASSESSMENT

MATHEMATICS

Paper 01

MAY 3, 2024 (a.m.)

1 hour and 10 minutes

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test has 40 questions. You have 1 hour and 10 minutes to answer them.

2. Each question has **four** suggested answers: (A), (B), (C) and (D). Read each question carefully and then choose the correct answer.

3. On your answer sheet, find the number that matches the question you intend to answer.

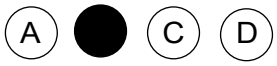
4. Shade the circle with the letter, (A), (B), (C) or (D), that matches your answer for each question.

   Sample Question

   The sum of 4 and 5 is

   (A) 1
   (B) 9
   (C) 20
   (D) 45

   Sample Answer

   The correct answer is “9”, so (B) has been shaded.

5. If you want to change your answer, erase it completely before you fill in your new choice.

6. When the supervisor tells you to begin, turn the page and work as quickly and as carefully as you can.

7. If you try a question and find that you cannot answer it, go on to the next one. You may return to that question later.

8. You must **not** use calculators for this test. Rough work may be done in this booklet.

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

1. Which of the following numbers represents “five hundred sixty thousand four”?

(A) 560 004
(B) 500 642
(C) 560 040
(D) 564 420

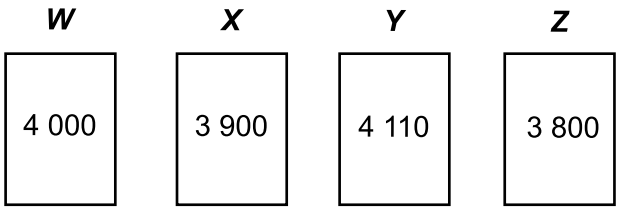
2. The value of the **6** in the number 42 650 is

(A) 6
(B) 60
(C) 600
(D) 6 000

3. Twain is skip counting and writes down the numbers 20, 25, 30, 35, 40, 45, 50, 55 and so on. What number is he skip counting by?

(A) One
(B) Two
(C) Five
(D) Ten

Question **4** refers to the following diagram which shows 4 cards, *W*, *X*, *Y* and *Z*, each with a four-digit number.



4. In which of the following groups are the numbers on the cards arranged from **largest** to **smallest**?

(A) Y, Z, W, X
(B) Y, W, X, Z
(C) W, Y, Z, X
(D) W, X, Y, Z

Question **5** refers to the following numerical pattern.

5. Which of the following number sequences has the **same** pattern as the one above?

(A) 2, 4, 6, 8, 10, ...
(B) 1, 4, 7, 10, 13, ...
(C) 3, 6, 9, 12, 15, ...
(D) 2, 8, 14, 20, 26, ...

6. If 36 ÷ ☐ = 0.036, then ☐ represents the number

(A) 10
(B) 100
(C) 1 000
(D) 10 000

Questions **7** and **8** refer to the following sequence of figures, made up of squares.

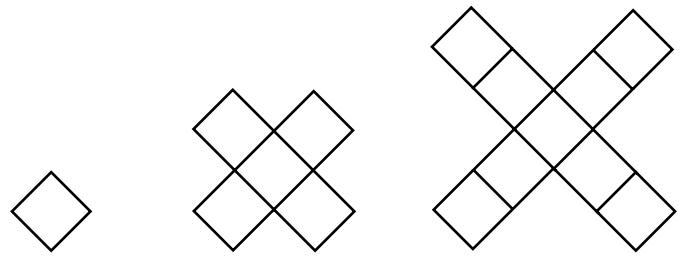
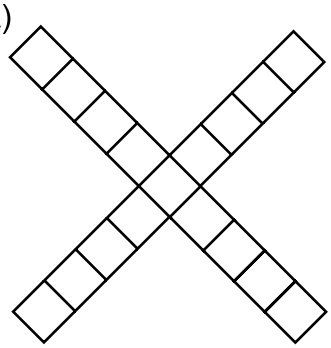
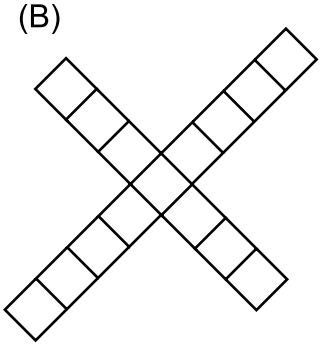
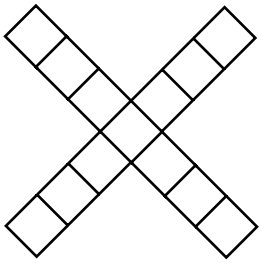


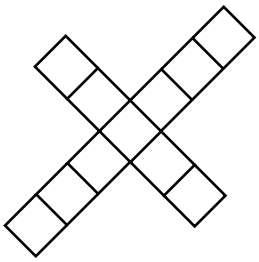
Figure 1 **Figure 2** **Figure 3**

7. Which of the following diagrams would represent **Figure 5** of the sequence?

(A)


(B)


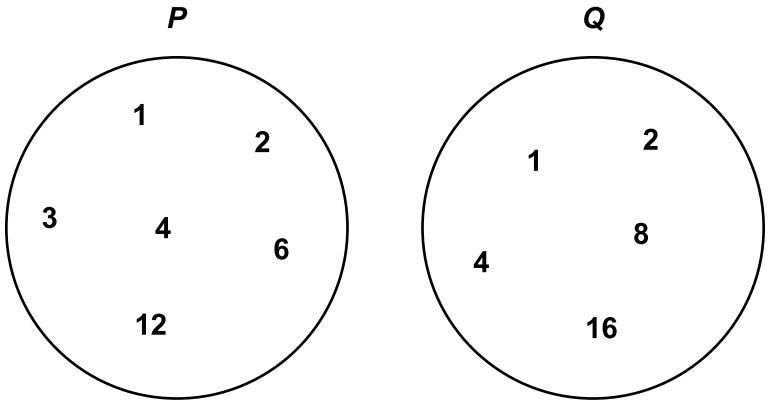
(C)


(D)


8. If the pattern is repeated, how many squares would be in **Figure 6**?

(A) 17
(B) 20
(C) 21
(D) 29

9. The following diagram shows two sets, *P* and *Q*.



Which of the following sets is a subset of Set *P* **and** Set *Q*?

(A) {8, 16}
(B) {1, 2, 4}
(C) {3, 6, 12}
(D) {1, 2, 3, 4, 6, 8, 12, 16}

10. If Set *E* and Set *F* have the same number of different elements, then the two sets are said to be

(A) equal
(B) empty
(C) infinite
(D) equivalent

11. Which of the following sets is an example of an empty set?

(A) {Odd numbers that are multiples of 2}
(B) {Prime numbers that are divisible by 2}
(C) {Days of the week that begin with S}
(D) {Months of the year that begin with the letter M}

12. What is the result when the following subtraction is done?

$$\begin{array}{rcccc} & 8 & 9 & 2 & 3 \\ - & 5 & 2 & 4 & 7 \\ \hline & & & & \\ \hline \end{array}$$

(A) 3 676
(B) 3 684
(C) 3 786
(D) 14 170

13. The number 198 is **exactly** divisible by both

(A) 3 and 4
(B) 5 and 6
(C) 3 and 9
(D) 4 and 11

14. $12 + 24 \div (8 - 6) =$

(A) 30
(B) 24
(C) 19
(D) 18

15. A carpenter worked every day for one week and earned a sum of $9 128. If he earned the same amount of money each day, then his daily wage was

(A) $ 652
(B) $ 760
(C) $1 304
(D) $4 564

16. Amy had 25 pencils. She gave 3 of her friends an equal number of pencils and had 7 remaining. How many pencils did she give to each friend?

(A) 2
(B) 3
(C) 4
(D) 6

17. Which of the following fractions is equivalent to $\frac{3}{5}$?

(A) $\frac{6}{10}$

(B) $\frac{9}{10}$

(C) $\frac{6}{15}$

(D) $\frac{12}{15}$

18. Which of the following fractions is the same as $\frac{11}{8}$?

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

(B) $1\frac{3}{8}$

(C) $1\frac{3}{11}$

(D) $1\frac{8}{11}$

19. $\frac{5}{12} - \frac{1}{8} =$

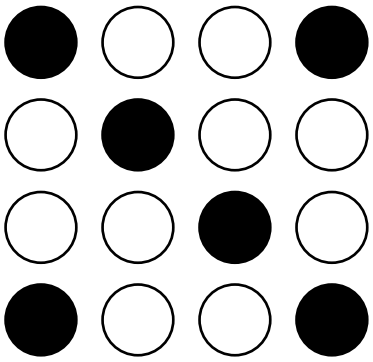
(A) $\frac{7}{24}$

(B) $\frac{7}{12}$

(C) $\frac{4}{12}$

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

Question **20** refers to the following diagram which shows 16 circles, 6 of which are shaded.



20. What fraction of the total number of circles is shaded?

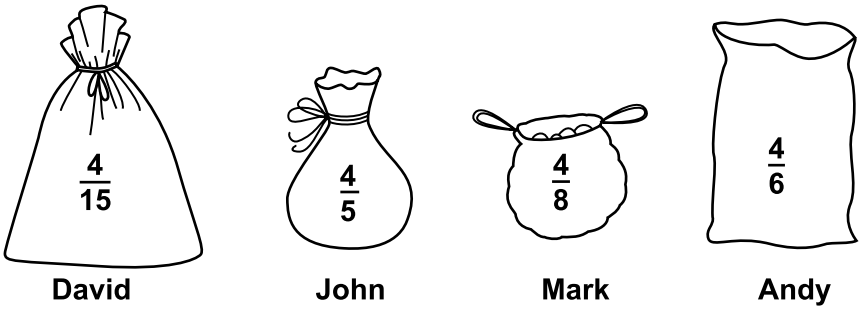
(A) $\frac{1}{4}$

(B) $\frac{6}{10}$

(C) $\frac{5}{8}$

(D) $\frac{3}{8}$

Question **21** refers to the following diagram which shows the fraction of marbles lost by four boys during a game. Each boy started with the same number of marbles.



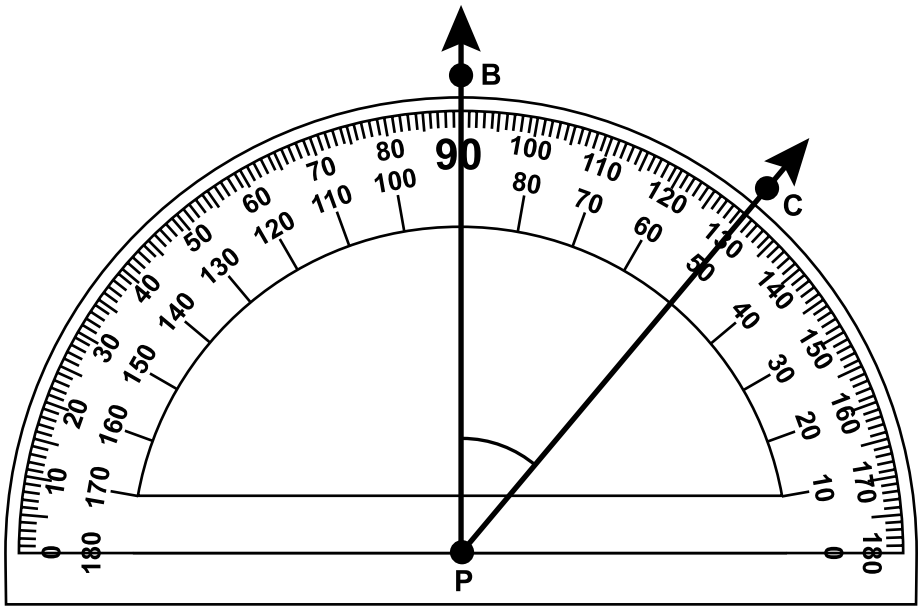
21. Which of the lists below arranges the names of the boys by the number of marbles they lost from **smallest** to **largest**?

(A) David, Mark, Andy, John
(B) John, Andy, Mark, David
(C) Andy, John, David, Mark
(D) David, John, Mark, Andy

22. A bag contains black and red counters. $\frac{1}{5}$ of the counters in the bag are black and the **remaining** 64 counters are red. How many counters are there in the bag?

(A) 28
(B) 49
(C) 72
(D) 80

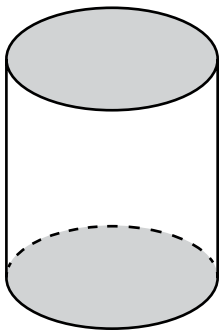
Question **23** refers to the following diagram which shows the measurement of angle *BPC*.



23. What is the size of the angle *BPC*?

(A) 40°
(B) 50°
(C) 90°
(D) 130°

Question **24** refers to the following diagram which shows a solid shape.



24. Which of the following groups of properties **exactly** matches the properties of the shape shown above?

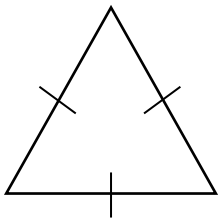
(A)
3 faces
0 vertices
0 edges

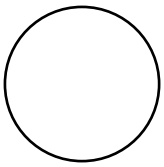
(B)
3 faces
0 vertices
2 edges

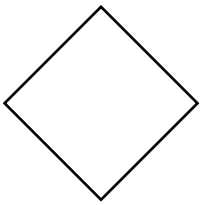
(C)
4 faces
0 vertices
3 edges

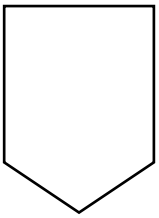
(D)
2 faces
0 vertices
2 edges

25. Which of the following shapes has only **one** line of symmetry?

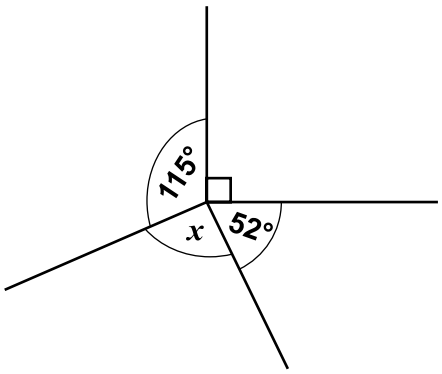
(A) 

(B) 

(C) 

(D) 

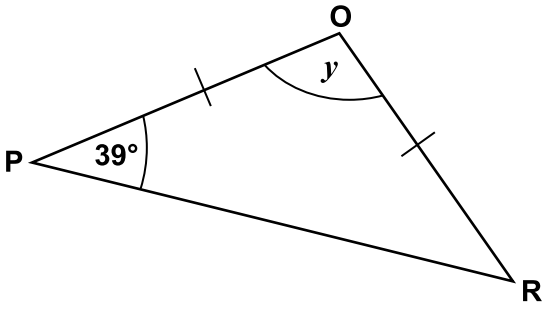
Question **26** refers to the following diagram which shows angles at a point.



26. The size of angle x in the diagram above is

(A) 90°
(B) 93°
(C) 103°
(D) 128°

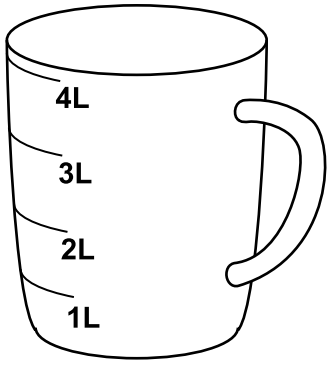
Question **27** refers to the following diagram which shows an isosceles triangle, *POR*.



27. What is the size of angle y in the diagram above?

(A) 51°
(B) 78°
(C) 90°
(D) 102°

Question **28** refers to the following diagram which shows a four-litre jug.



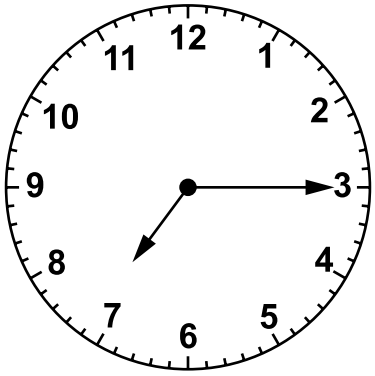
28. How many millilitres of water does the jug hold when full?

(A) 40 000
(B) 4 000
(C) 400
(D) 40

29. The time 9:25 p.m. written in the 24-hour format is

(A) 09:25 h
(B) 18:25 h
(C) 20:25 h
(D) 21:25 h

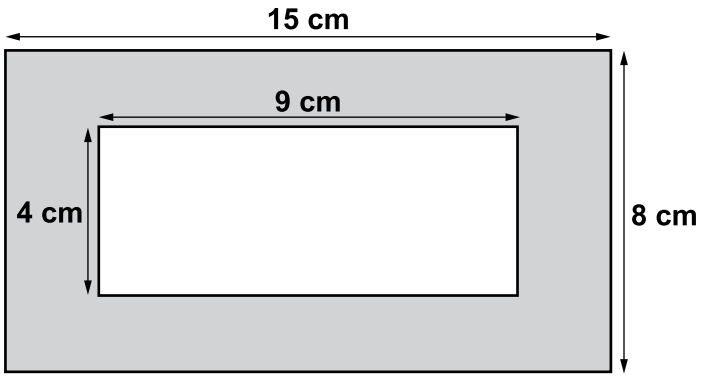
Question **30** refers to the following diagram of a clock.



30. Emma left home for school 45 minutes **after** the time shown on the clock. At what time did she leave home?

(A) 07:30 h
(B) 08:00 h
(C) 08:30 h
(D) 09:00 h

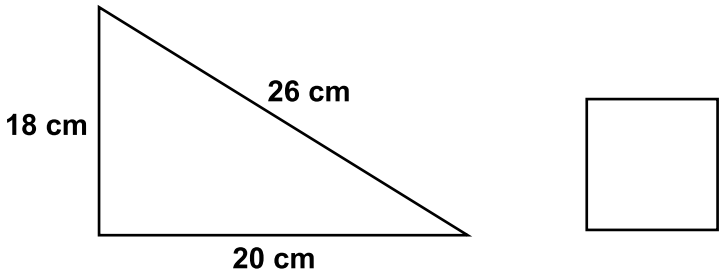
Question **31** refers to the following diagram which shows the floor plan of a bathroom.



31. The area of the shaded part of the diagram above is

(A) 24 cm^2
(B) 36 cm^2
(C) 84 cm^2
(D) 120 cm^2

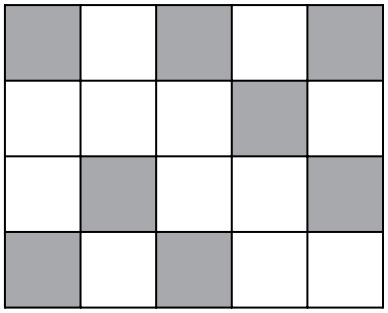
Question **32** refers to the following diagram which shows a triangle and a square.



32. The perimeter of the square is half the perimeter of the triangle. What is the length of **each** side of the square?

(A) 4 cm
(B) 8 cm
(C) 16 cm
(D) 32 cm

Questions **33** and **34** refer to the following diagram which shows a rectangle divided into identical squares.



33. The ratio of the number of shaded squares to the number of unshaded squares in the rectangle is

(A) 2:3
(B) 2:5
(C) 4:2
(D) 5:2

34. How many **more** squares must be shaded so that 75% of the whole rectangle is shaded?

(A) 7
(B) 9
(C) 12
(D) 15

35. A man buys a shirt for $2 750 and sells it for $2 540. The amount he lost is

(A) $ 28
(B) $155
(C) $183
(D) $210

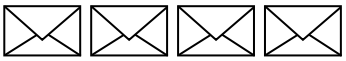
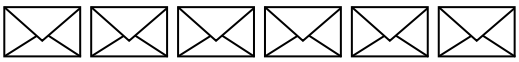
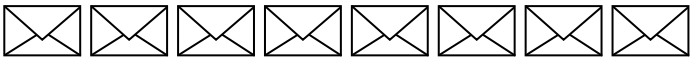
36. Tommy bought 3 oranges for $500. What is the cost of 30 similar oranges?

(A) $1 125
(B) $1 500
(C) $3 000
(D) $5 000

37. Jenny bought a belt and a bag. The bag cost 5 times **more** than the belt. If the bag costs $5 250, how much did she pay **altogether** for the belt and the bag?

(A) $1 050
(B) $4 200
(C) $6 300
(D) $6 400

Questions **38** and **39** refer to the following pictograph which shows the number of letters collected from a post box on each day in a certain week.

Day of the Week	Number of Letters Collected
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

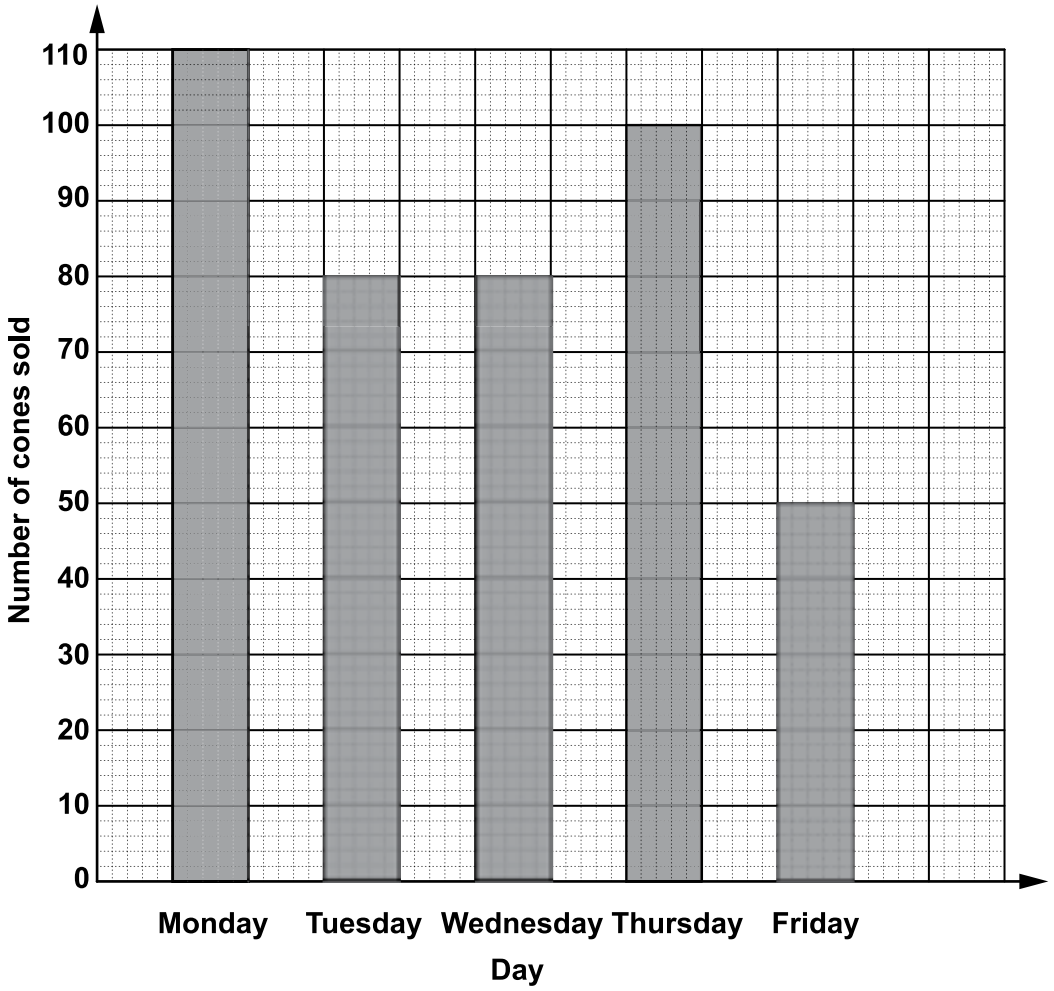
38. On which day of the week did the number of letters collected total half the number collected on Friday?

(A) Monday
(B) Tuesday
(C) Wednesday
(D) Thursday

39. If 20 **more** letters were collected on Friday than on Thursday, how many letters were collected on Monday?

(A) 30
(B) 60
(C) 70
(D) 80

Question **40** refers to the following bar graph which shows the number of cones sold at Barry's Ice-cream Parlour over a five-day period.



40. The average number of cones sold over the 5 days is

(A) 84
(B) 80
(C) 64
(D) 50

END OF TEST

IF YOU FINISH BEFORE TIME IS UP, CHECK YOUR WORK ON THIS TEST.

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WRITE ON
THIS PAGE

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Prepared by

C A R I B B E A N E X A M I N A T I O N S C O U N C I L