TEST CODE 09634010

FORM TP 2022387

GUYANA
MINISTRY OF EDUCATION
NATIONAL GRADE SIX ASSESSMENT

MATHEMATICS

Paper 01

JULY 7, 2022 (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 has a 5 in the ten thousands place?

(A) 254 009
(B) 486 543
(C) 598 947
(D) 795 207

2. Which of the following numbers is the same as 2 000 + 700 + 90 + 5?

(A) 2 759
(B) 2 795
(C) 5 927
(D) 9 270

3. Which of the following numbers is a multiple of 8?

(A) 2
(B) 4
(C) 12
(D) 24

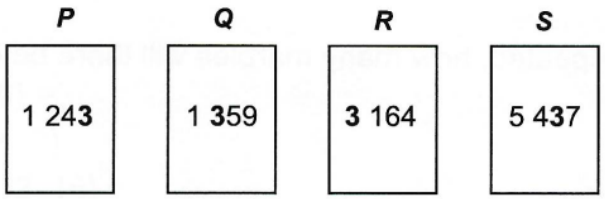
4. The product of the **prime** factors of 18 is

(A) 2
(B) 6
(C) 12
(D) 18

5. A number that is **both** a factor and a multiple of 24 is

(A) 12
(B) 24
(C) 36
(D) 48

Question **6** refers to the following diagram which shows 4 cards, *P*, *Q*, *R* and *S*, with a four-digit number on each.



6. In which of the following groups are the cards arranged so that the place value of the "3" is in **ascending** order?

(A) *P*, *R*, *Q*, *S*
(B) *P*, *S*, *R*, *Q*
(C) *P*, *Q*, *S*, *R*
(D) *P*, *S*, *Q*, *R*

Question **7** refers to the following diagram which shows a sequence of 3 figures, made with marbles, that shows a pattern.

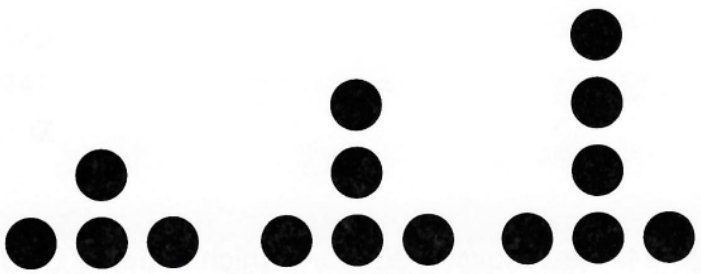
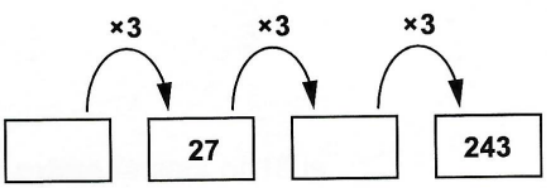


Figure 1 **Figure 2** **Figure 3**

7. If the pattern is repeated, how many marbles will there be in Figure 5?

(A) 7
(B) 8
(C) 9
(D) 10

Question **8** refers to the following sequence. The rule of the sequence is written above the arrows.



8. The 2 missing numbers in the sequence are

(A) 9 and 81
(B) 6 and 18
(C) 26 and 56
(D) 18 and 84

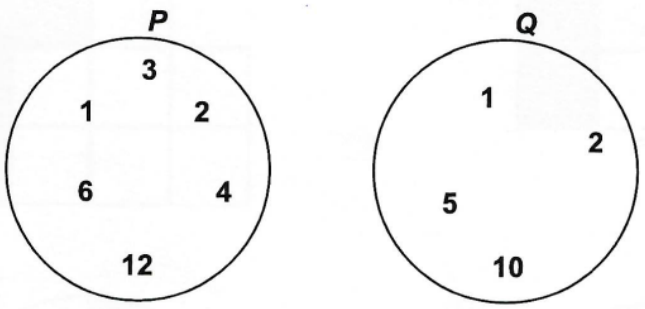
9. If P = {Prime numbers less than 10}, then the elements of P are

(A) {2, 3, 5, 7}
(B) {2, 3, 5, 7, 9}
(C) {1, 2, 3, 5, 7}
(D) {1, 2, 3, 5, 7, 9}

10. Given that Set P = {1, 2, 4, 8}, then which of the following sets is **equal** to Set P?

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

Question **11** refers to the following diagram which shows sets P and Q.



11. Which of the following sets of elements must be removed from Set Q so that $Q \subset P$?

(A) {1, 2}
(B) {5, 10}
(C) {1, 2, 5}
(D) {1, 2, 10}

12. The result of

$$\begin{array}{r} 8\ 9\ 2\ 3 \\ -\quad 2\ 4\ 9 \\ \hline \\ \hline \end{array}$$ is

(A) 8 162
(B) 8 674
(C) 8 684
(D) 9 172

13. In his last 3 CPL matches, Prem made 37, 53 and 60 runs. What was his mean score for the 3 matches?

(A) 50
(B) 53
(C) 90
(D) 150

14. $8 + 16 \div 4 - 3 =$

(A) 3
(B) 9
(C) 10
(D) 12

15. Last year Sue spent \$985 to buy a toy. This year she spent \$215 more than last year to buy another toy. How much did Sue spend **altogether** on the 2 toys?

(A) \$1 200
(B) \$1 755
(C) \$2 185
(D) \$2 295

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Question **16** refers to the following table which shows the number of runs Martin scored in 5 cricket matches. The number of runs he scored in Match 5 is missing.

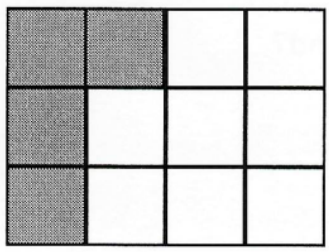
Match	1	2	3	4	5
Number of Runs Scored	46	64	10	125	_____

16. If the average runs Martin scored for the 5 matches is 51, how many runs did he score in Match 5?

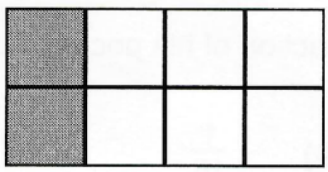
(A) 10
(B) 20
(C) 35
(D) 51

17. In which of the following diagrams is $\frac{1}{2}$ shaded?

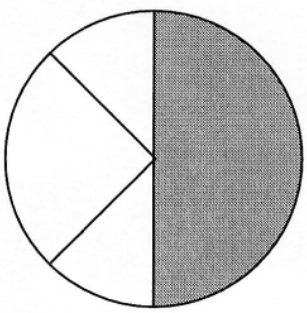
(A)



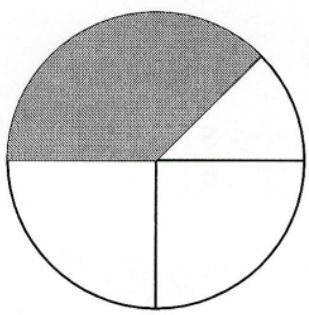
(B)



(C)



(D)



18. What is the place value of the digit **6** in the number 247.167?

(A) Tens
(B) Tenths
(C) Hundreds
(D) Hundredths

19. In which of the following groups are the numbers arranged in order from **largest** to **smallest**?

(A) 4.01, 0.41, 0.401
(B) 4.01, 0.401, 0.41
(C) 0.041, 0.401, 0.41
(D) 0.041, 0.41, 0.401

20. Ryan spent $\frac{1}{8}$ of his pocket money on sweets and $\frac{1}{2}$ on ice cream. What fraction of his pocket money did Ryan spend?

(A) $\frac{1}{16}$

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

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

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

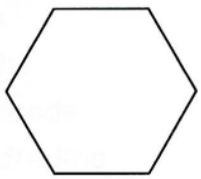
21. $(5.4 - 4.73) + 6.29 =$

(A) 0.67
(B) 3.83
(C) 6.96
(D) 16.42

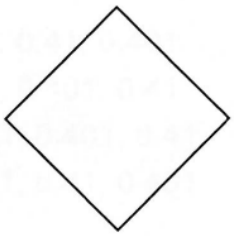
22. Paul spends $\frac{1}{2}$ of his daily allowance on snacks, $\frac{1}{4}$ on books and saves the remainder. If he saves \$60, how much is his daily allowance?

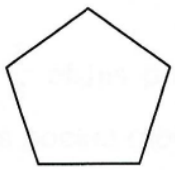
(A) \$240
(B) \$320
(C) \$360
(D) \$480

23. Which of the following polygons is a pentagon?

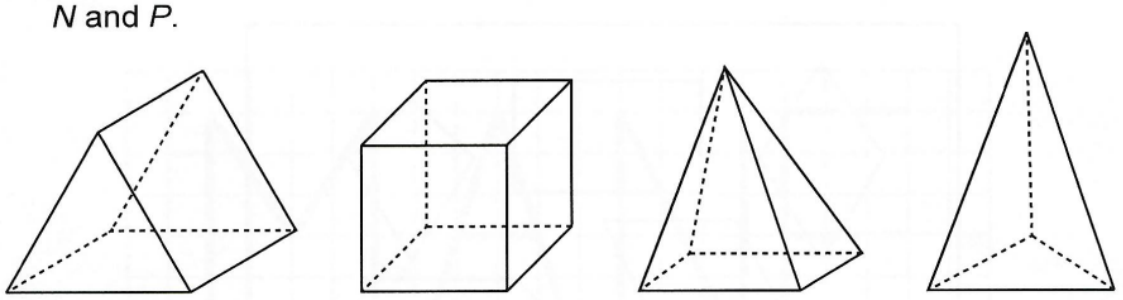
(A) 

(B) 

(C) 

(D) 

Question **24** refers to the following diagram which shows 4 solid shapes, *L*, *M*, *N* and *P*.

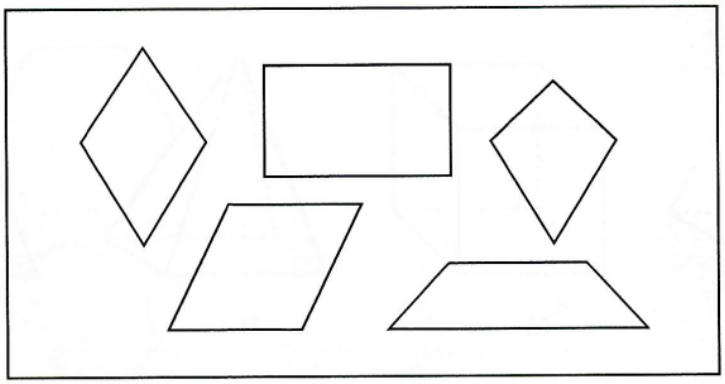


L **M** **N** **P**

24. Which of the shapes is correctly matched to its properties?

	Name of Solid	**Properties**
(A)	*P*	5 faces, 9 edges, 6 vertices
(B)	*L*	6 faces, 12 edges, 8 vertices
(C)	*N*	5 faces, 8 edges, 5 vertices
(D)	*M*	4 faces, 6 edges, 4 vertices

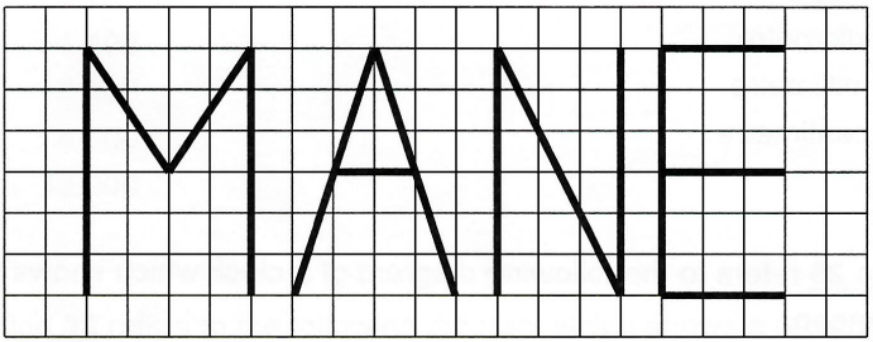
Question **25** refers to the following diagram which shows 5 shapes.



25. Which of the following properties is common to **all** of the 5 shapes shown above?

(A) Each has 4 equal sides.
(B) Each has 4 lines of symmetry.
(C) Each has at least 2 right angles.
(D) The interior angles add up to 360°.

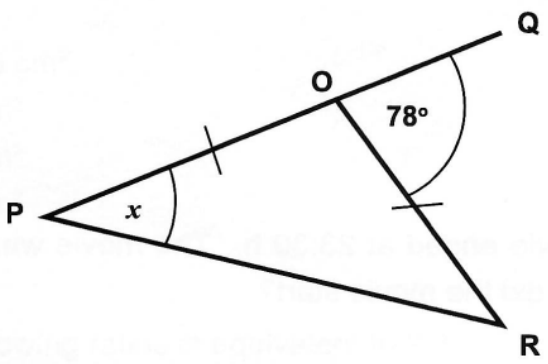
Question **26** refers to the following diagram which shows 4 letters drawn on a grid.



26. Which of the letters shown above has **no** symmetry?

(A) A
(B) E
(C) M
(D) N

Question **27** refers to the following diagram which shows an isosceles triangle, *POR*. In the diagram, *POQ* is a straight line and the sides *OP* and *OR* are equal.



27. If angle *ROQ* = 78°, then the value of x is

(A) 22°
(B) 39°
(C) 51°
(D) 102°

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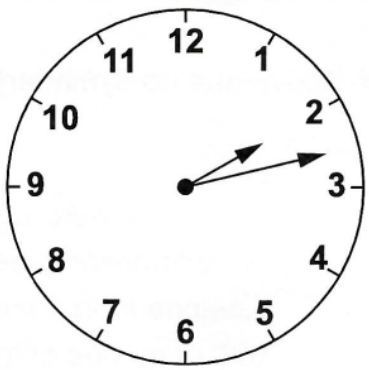
28. The **most** appropriate unit to measure the distance between 2 cities is

(A) metre
(B) kilometre
(C) millimetre
(D) centimetre

Question **29** refers to the following diagram of a clock which shows the time in the afternoon.



29. What time in the **afternoon** is shown on the face of the clock?

(A) 03:10 h
(B) 02:13 h
(C) 13:13 h
(D) 14:13 h

30. At a theatre, a movie ended at 23:30 h. The movie was 2 hours 15 minutes long. At what time did the movie start?

(A) 09:15 h
(B) 02:45 h
(C) 21:15 h
(D) 23:40 h

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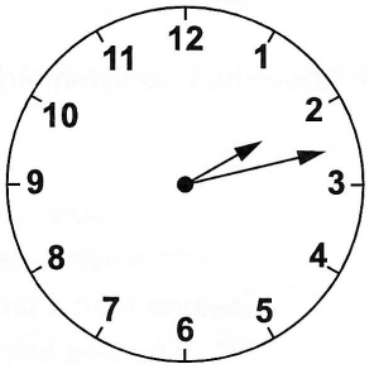

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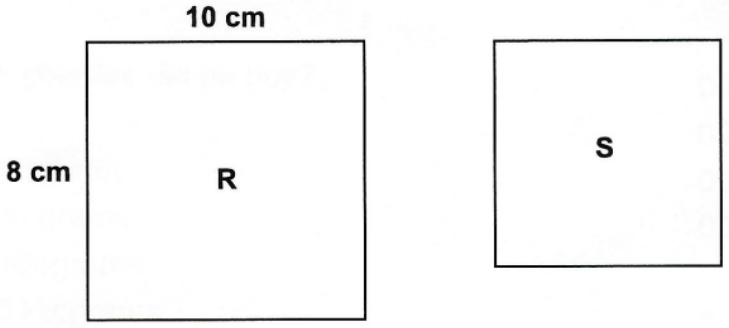
(A) 09:15 h
(B) 02:45 h
(C) 21:15 h
(D) 23:40 h

31. A machine can print 400 sheets of paper in 5 minutes. How many sheets of paper can it print in one hour, working at the same rate?

(A) 1 400
(B) 2 400
(C) 4 800
(D) 12 000

Question **32** refers to the following diagram which shows a rectangle (*R*) and a square (*S*).



32. *R* measures 10 cm by 8 cm. If the perimeter of *R* and *S* are **equal**, then the area of *S* is

(A) 20.25 cm^2
(B) 81 cm^2
(C) 324 cm^2
(D) 1 296 cm^2

33. Which of the following ratios is equivalent to 2:3?

(A) 4:8
(B) 4:9
(C) 6:9
(D) 6:12

34. Ryan buys a clock for \$80 and sells it for \$100. His profit as a percentage of the cost price is

(A) 20%
(B) 25%
(C) $33\frac{1}{3}\%$
(D) $37\frac{1}{2}\%$

35. If a toy truck which costs \$3 400 is sold at a profit of \$400, then the selling price of the truck is

(A) \$2 600
(B) \$3 000
(C) \$3 200
(D) \$3 800

36. A pump which costs \$80 000 was sold at a loss of 20%. What was the selling price of the pump?

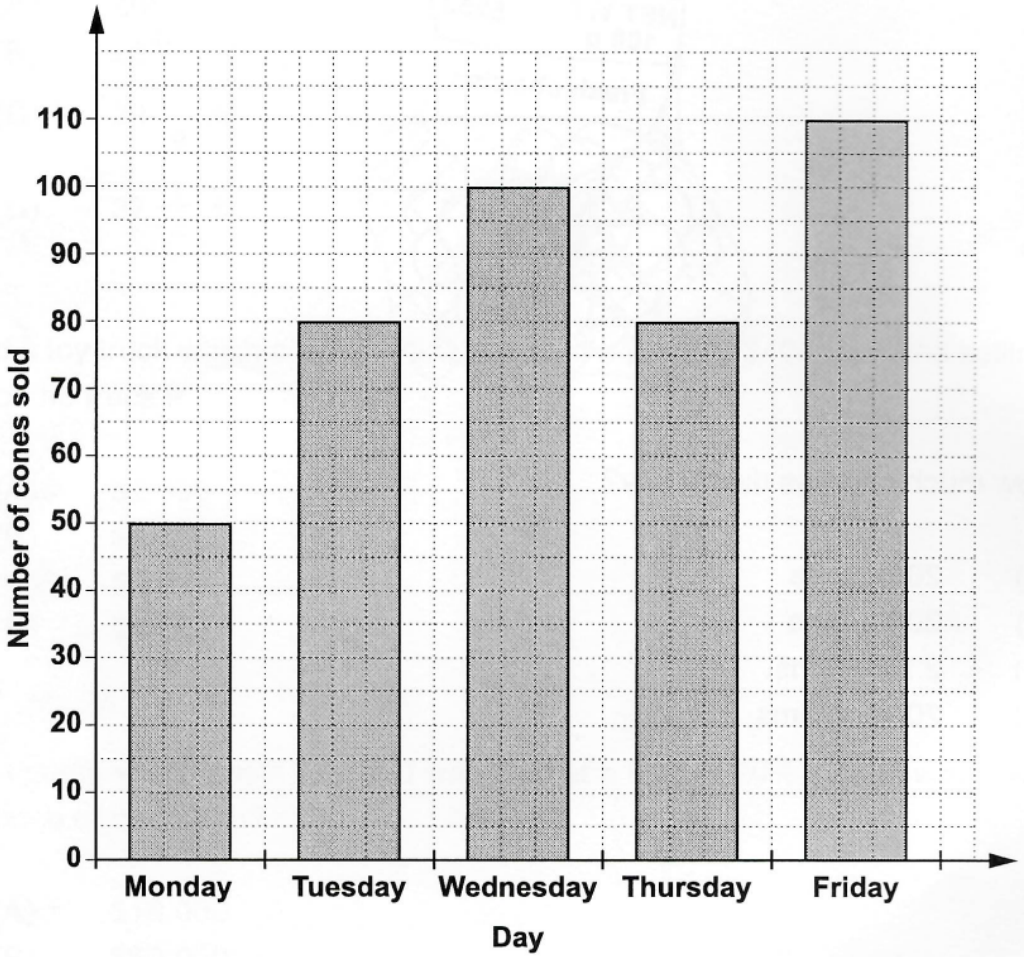
(A) \$16 000
(B) \$60 000
(C) \$64 000
(D) \$96 000

37. Roysdale bought some of the cherries shown below which cost him **exactly** $5 000.

How much cherries did he buy?

(A) 20 pounds
(B) 200 grams
(C) 2 kilograms
(D) 20 kilograms

Questions **38** and **39** refer to the following bar graph which shows the number of cones sold at Barry's Ice Cream Parlour over a five-day period.



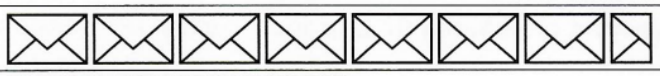
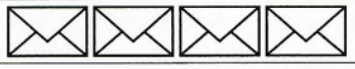
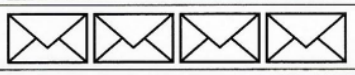
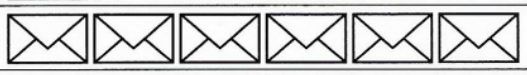
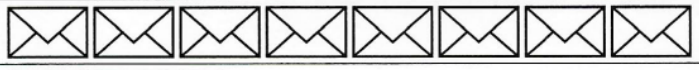
38. The same number of cones was sold on

(A) Tuesday and Thursday.
(B) Wednesday and Friday.
(C) Monday, Tuesday and Thursday.
(D) Monday, Wednesday and Friday.

39. How many **more** cones were sold on Friday than on Monday?

(A) 30
(B) 40
(C) 50
(D) 60

Question **40** refers to the following pictograph which represents the number of letters that were collected from the post office on each day in a certain week.

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

40. If 25 letters were collected on Saturday, how many **more** letters were collected on Tuesday than on Saturday?

(A) 15
(B) 20
(C) 40
(D) 65

END OF TEST

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

Prepared by

CARIBBEAN EXAMINATIONS COUNCIL