TEST CODE 09634010

FORM TP 2023392

GUYANA
MINISTRY OF EDUCATION
NATIONAL GRADE SIX ASSESSMENT

MATHEMATICS

Paper 01

MAY 4, 2023 (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. The number 125, written in words is

(A) one hundred two
(B) one hundred five
(C) one hundred fifty-two
(D) one hundred twenty-five

2. The place value of the digit **3** in the number 2 530 is

(A) tens
(B) ones
(C) hundreds
(D) thousands

3. Which of the following numbers is a multiple of **both** 6 and 8?

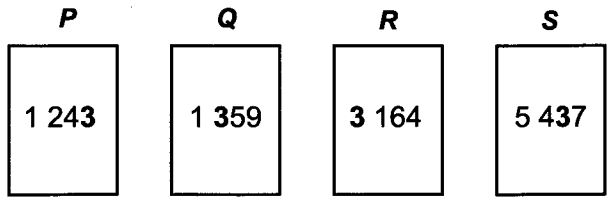
(A) 2
(B) 12
(C) 16
(D) 24

4. $26 \div \square = 0.026$

The number represented by the $\square$ is

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

Question **5** refers to the following diagram which shows 4 cards, *P*, *Q*, *R* and *S*, with a four-digit number on each.



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

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

6. The first number in a pattern is 5. The pattern follows the rule "Add 3". What are the next 4 numbers in the pattern?

(A) 1, 4, 7, 10
(B) 3, 6, 9, 12
(C) 8, 11, 14, 17
(D) 15, 45, 225, 1125

7. Cups are sold 6 in a pack and plates are sold 8 in a pack. Joya wants the **same** number of cups and plates for a party. What is the **least** number of packs of each item that she must buy?

(A) 14 packs of each item
(B) 24 packs of each item
(C) 3 packs of cups, 4 packs of plates
(D) 4 packs of cups, 3 packs of plates

Question **8** refers to the following diagram which shows a sequence of 3 figures, made with squares and circles. The sequence forms a pattern.

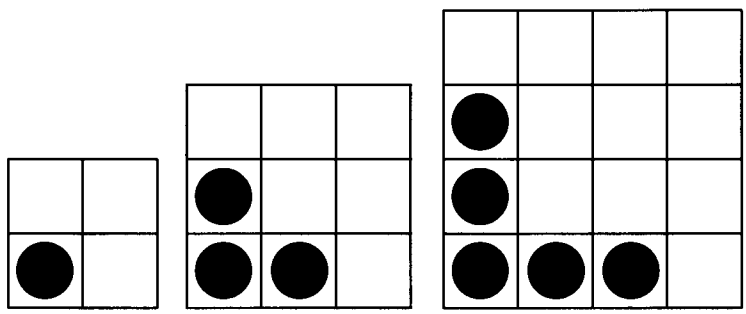


Figure 1 **Figure 2** **Figure 3**

8. How many circles will be in Figure 5?

(A) 5
(B) 6
(C) 7
(D) 9

9. If Set *A* = {2, 3, 5, 7}, then which of the following phrases **best** describes Set *A*?

(A) Some numbers from 2 to 7
(B) The first four odd numbers
(C) The first four prime numbers
(D) All odd and even numbers from 2 to 7

10. Set $P = \{ \square, \triangle, \bigcirc \}$. Which of the following sets is a subset of Set P?

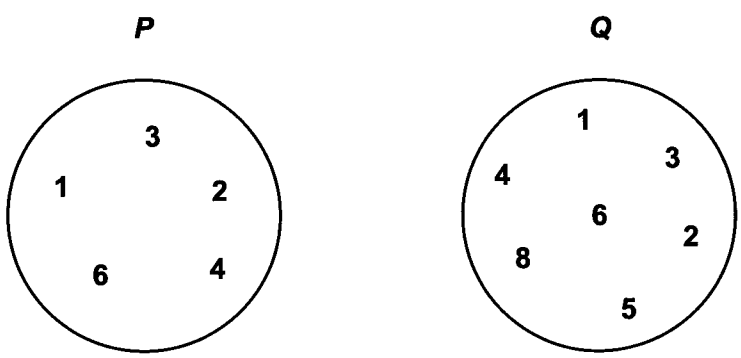
(A) $\{\ \}$

(B) $\{ \square \}$

(C) $\{ \bigcirc, \triangle, \diamond \}$

(D) $\{ \square, \triangle, \bigcirc \}$

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



11. Which of the following sets of elements, when added to Set P, will make $P = Q$?

(A) {6, 8}
(B) {5, 8}
(C) {1, 2, 4, 6}
(D) {1, 2, 3, 4, 5, 6}

12. The **smallest** possible number which can be divided equally by 3, 5 and 10 is

(A) 15
(B) 30
(C) 60
(D) 150

Question **13** refers to the following addition problem.

$$\begin{array}{r} 2\,\square\,4 \\ +\quad 5\;1\;9 \\ \hline 7\;8\;3 \\ \hline \end{array}$$

13. The digit represented by the ☆ is

(A) 1
(B) 3
(C) 6
(D) 7

14. $(7 - 3) + 16 \div 4 =$

(A) 2
(B) 5
(C) 6
(D) 8

15. Joy and Sue each went to buy a dress. Joy's dress cost $985. Sue spent $215 more than Joy to buy her dress. How much did they spend **altogether** to buy the 2 dresses?

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

Question **16** refers to the following incomplete table which shows the number of apples Miriam sold on 4 days.

Day	1	2	3	4
Number of Apples Sold	_____	80	_____	60

16. The **average** number of apples Miriam sold per day was 90. She sold 20 **more** apples on Day 3 than on Day 1. How many apples did she sell on Day 1?

(A) 100
(B) 110
(C) 120
(D) 220

17. If $5\frac{3}{4} = \frac{\square}{4}$, then the value represented by $\square$ is

(A) 15
(B) 19
(C) 20
(D) 23

18. Which of the following fractions is in its simplest form?

(A) $\frac{13}{19}$

(B) $\frac{9}{21}$

(C) $\frac{18}{38}$

(D) $\frac{6}{8}$

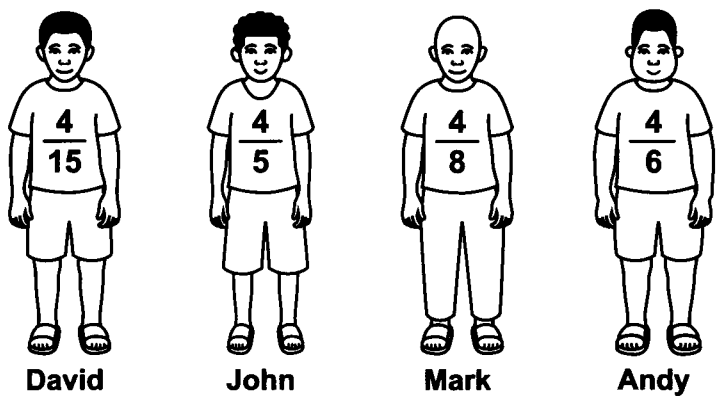
19. The sum of 12 + 3.5 + 8.09 is

(A) 9.16
(B) 23.59
(C) 23.96
(D) 24.01

20. Of the 36 pupils in a class, $\frac{2}{9}$ of them play cricket. How many pupils play cricket?

(A) 8
(B) 9
(C) 11
(D) 28

Question **21** refers to the following diagram which shows 4 boys with fractions written on their shirts. Each boy had the same number of marbles. The fraction written on their shirts represent the fraction of marbles they lost.



21. Which of the lists below arranges the boys by the number of marbles they lost from **least** to **greatest**?

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

Question **22** refers to the following sequence.

$\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{12}$, _____, _____, $\frac{1}{24}$ . . .

22. The 4th and 5th terms of the sequence are

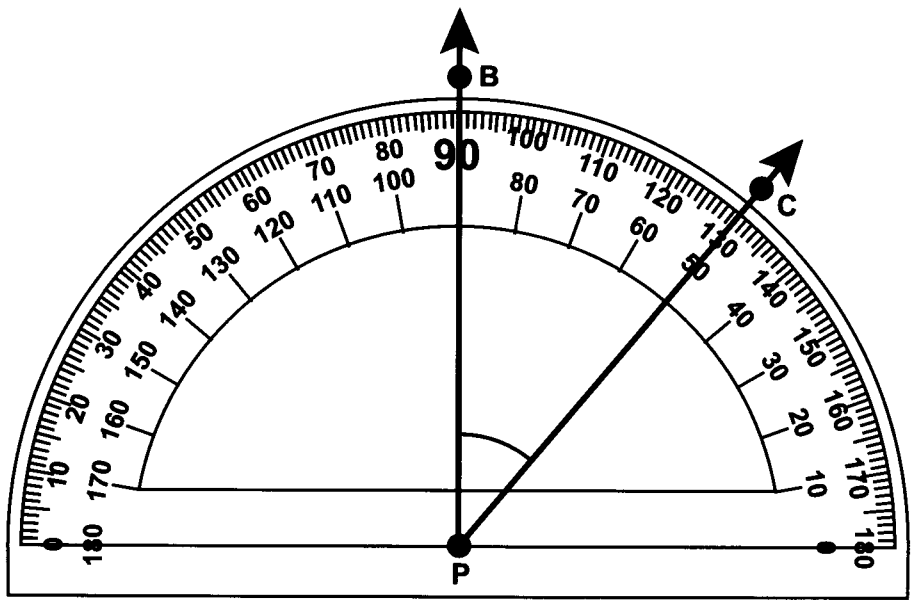
(A) $\frac{1}{14}$ and $\frac{1}{16}$

(B) $\frac{1}{16}$ and $\frac{1}{20}$

(C) $\frac{1}{14}$ and $\frac{1}{18}$

(D) $\frac{1}{18}$ and $\frac{1}{20}$

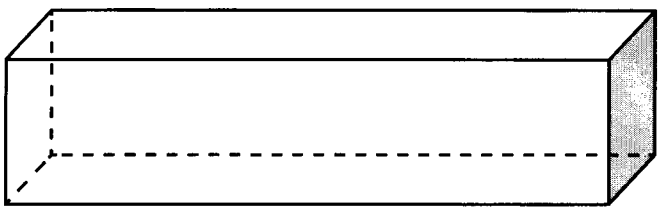
Question **23** refers to the following diagram which shows the measurement of angle *BPC*.



23. Angle *BPC* is classified as

(A) a right angle
(B) a reflex angle
(C) an acute angle
(D) an obtuse angle

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



24. Which group of properties below accurately describes the solid?

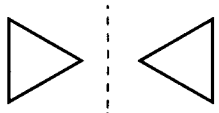
(A)
8 faces
6 vertices
12 edges

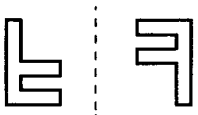
(B)
6 faces
8 vertices
12 edges

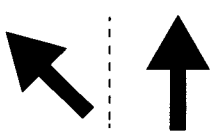
(C)
12 faces
8 vertices
6 edges

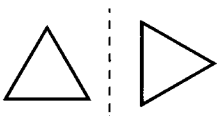
(D)
6 faces
12 vertices
8 edges

25. Which of the following pairs of shapes is symmetrical?

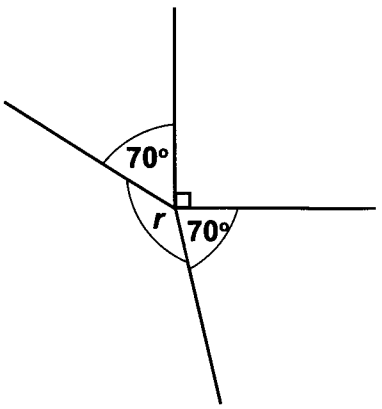
(A) 

(B) 

(C) 

(D) 

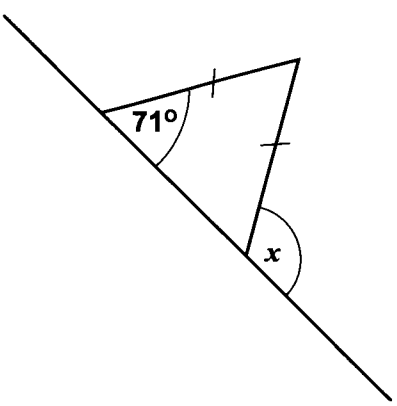
Question **26** refers to the following diagram which shows angles at a point.



26. What is the size of Angle ***r***?

(A) 110°
(B) 130°
(C) 220°
(D) 230°

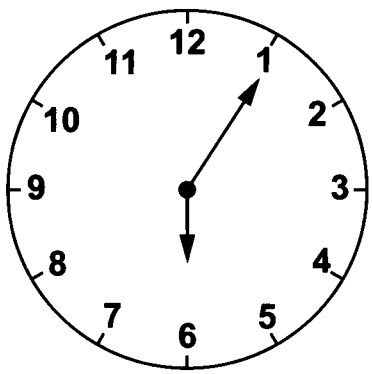
Question **27** refers to the following diagram which shows an isosceles triangle on a straight line.



27. What is the size of Angle x?

(A) 38°
(B) 52°
(C) 109°
(D) 142°

Question **28** refers to the following diagram of a clock which shows the time in the morning.



28. What time in the **morning** is shown on the clock?

(A) 01:30 h
(B) 18:05 h
(C) 13:30 h
(D) 06:05 h

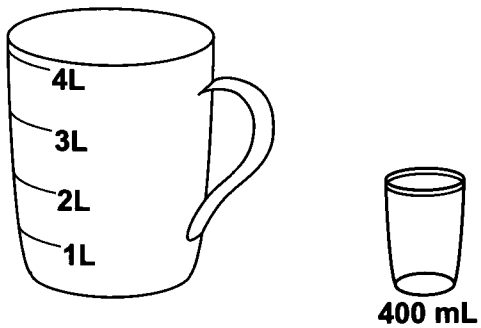
29. Which of the following units of measurements is **best** used for measuring the amount of oil in a barrel?

(A) Litres
(B) Grams
(C) Millilitres
(D) Kilograms

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

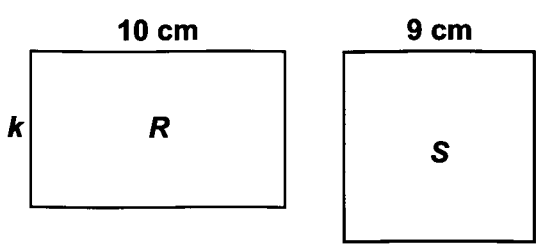
Question **31** refers to the following diagram which shows a four-litre jug and a 400-millilitre glass.



31. The jug is filled with 4 litres of water. If there is no spillage, how many glasses of water can be poured from the jug?

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

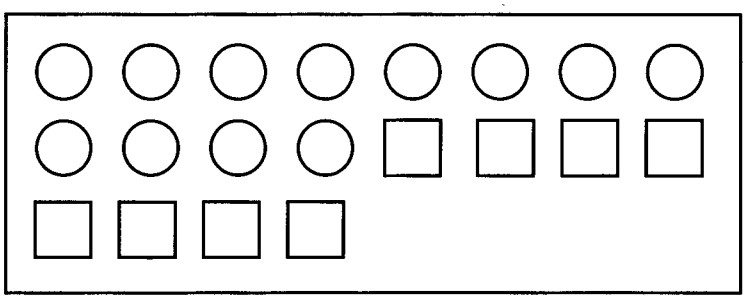
Question **32** refers to the following diagram which shows a rectangle (*R*) and a square (*S*).



32. *R* measures 10 cm by *k* cm. If the perimeter of *R* is **equal** to the perimeter of *S*, then the area of *R* is

(A) 64 cm^2
(B) 80 cm^2
(C) 324 cm^2
(D) 1 296 cm^2

Question **33** refers to the following diagram which shows a rectangle that contains a set of circles and squares.



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

(A) 2:1
(B) 2:3
(C) 3:1
(D) 3:2

34. Of the 500 passengers in an airplane, 45% are men and 20% are children. The number of women in the airplane is

(A) 150
(B) 166
(C) 175
(D) 180

35. A man buys a hat for $127.50 and sells it for $178.60. The profit he gains is

(A) $50.28
(B) $50.55
(C) $50.83
(D) $51.10

36. Rohan bought an electric bike for $75 000. He sold it and made a 20% profit. What was the selling price of the bike?

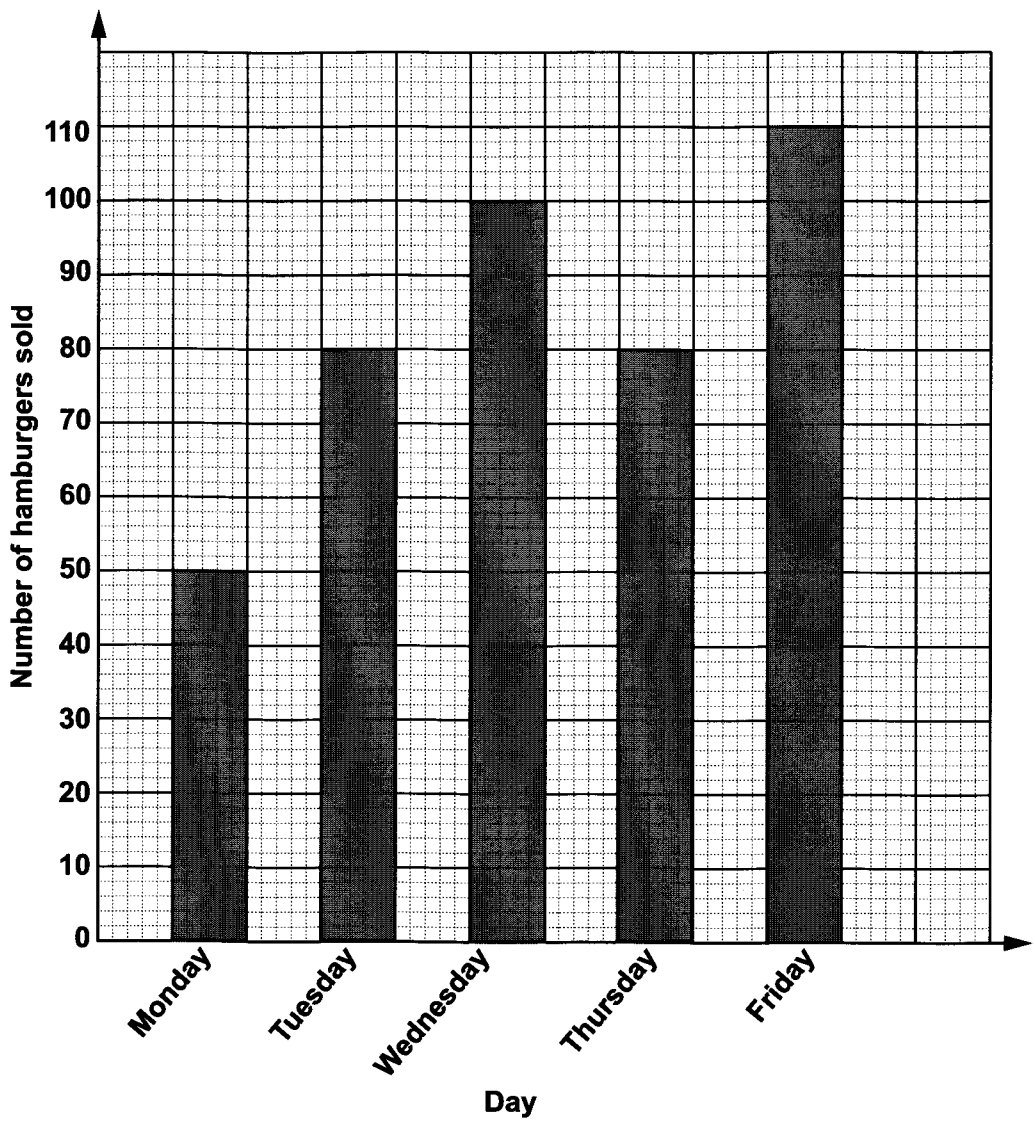
(A) $50 000
(B) $60 000
(C) $80 000
(D) $90 000

37. At a sale, Joyann got a 25% discount on her backpack and therefore paid $1 500. What was the original price of the backpack?

(A) $ 500
(B) $1 000
(C) $2 000
(D) $2 500

NOTHING HAS BEEN OMITTED.

Questions **38–40** refer to the following bar graph which shows the number of hamburgers sold at Barry's Burger Shack over a five-day period.



38. On which days were **more** than 80 hamburgers sold?

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

39. The average number of hamburgers sold over the 5 days is

(A) 50
(B) 84
(C) 86
(D) 100

40. Based on the graph, which of the following statements is correct?

(A) More hamburgers were sold on Monday and Wednesday than on Thursday and Friday.
(B) Twice the number of hamburgers sold on Monday was sold on Wednesday.
(C) Half the total number of hamburgers was sold on Friday.
(D) Barry's Burger Shack had the most sales on Monday.

END OF TEST

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