TEST CODE 09634010

FORM TP 2020387

GUYANA
MINISTRY OF EDUCATION
NATIONAL GRADE SIX ASSESSMENT

MATHEMATICS

Paper 01

APRIL 09, 2020 (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, 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.

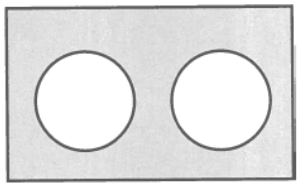
8. You must **not** use calculators for this test. Rough work may be done in this booklet.

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

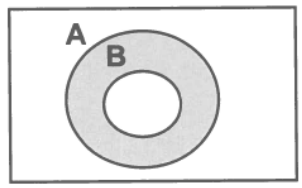
Copyright © 2019
All rights reserved.

1. In which of the following Venn diagrams does the **shaded region** represent $A \cap B$?

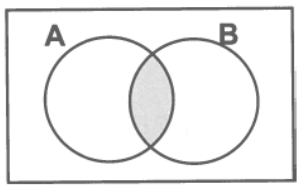
(A)



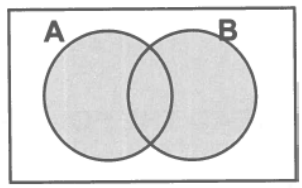
(B)



(C)



(D)



2. In which of the following numbers does the digit 8 represent 8 hundreds?

(A) 8 790
(B) 5 608
(C) 9 850
(D) 9 780

3. Which of the following numbers is a common factor of both 30 and 45?

(A) 6
(B) 15
(C) 30
(D) 90

4. Tim bought 5 oranges for $225. How much would 20 oranges cost?

(A) $ 900
(B) $1 125
(C) $2 250
(D) $4 500

5. What is the value of $60 - (10 + 14) \div 4 \times 3$?

(A) 3
(B) 27
(C) 42
(D) 58

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

(A) $\frac{5}{20}$

(B) $\frac{3}{9}$

(C) $\frac{6}{21}$

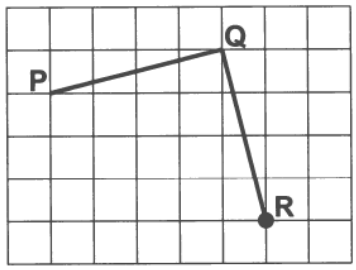
(D) $\frac{4}{5}$

7. $\frac{5}{20}$ expressed as a decimal is

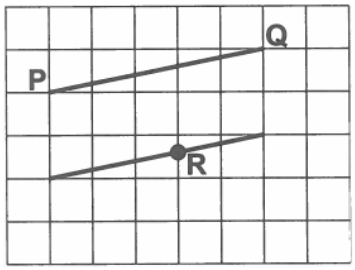
(A) 0.25
(B) 0.50
(C) 1.45
(D) 5.40

8. Through a point **R**, Damon drew a line perpendicular to the line **PQ**. Which of the following diagrams shows Damon's drawing?

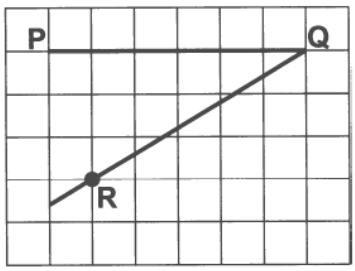
(A)



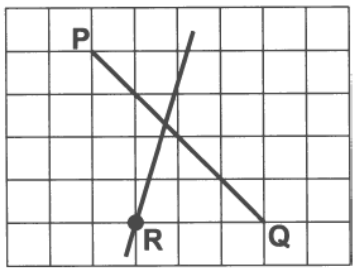
(B)



(C)



(D)



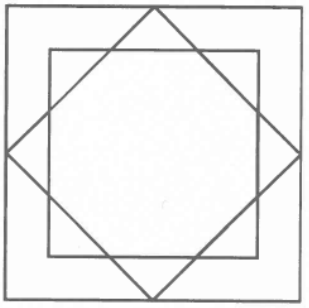
Question **9** refers to the following diagram which shows the letters of the word "HOUSE".

H O U S E

9. Which letters in the word above have **at least** 2 lines of symmetry?

(A) H, S
(B) O, E
(C) S, U
(D) H, O

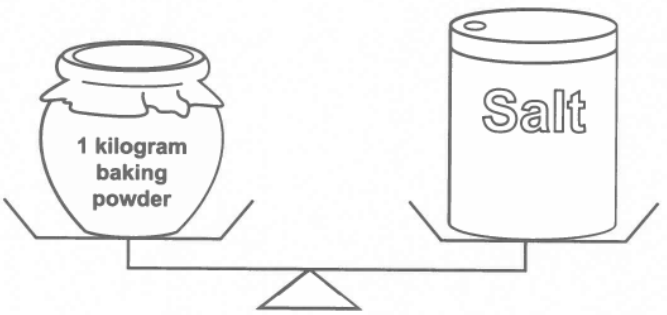
Question **10** refers to the following diagram which is made up of 3 squares of different sizes.



10. How many right angles are there in the figure?

(A) 12
(B) 15
(C) 16
(D) 20

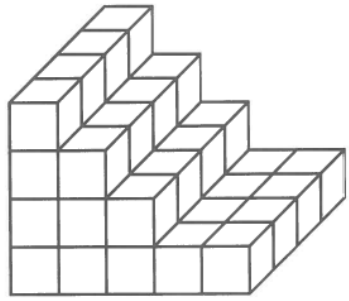
Question **11** refers to the following diagram which shows a balanced scale.



11. What is the mass of the salt?

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

Question **12** refers to the following diagram which shows a solid, built with unit cubes.



12. How many unit cubes are used to build the solid in the diagram above?

(A) 11
(B) 20
(C) 26
(D) 44

13. If the fraction of eggs sold at a stall is $\frac{12}{25}$, then the percentage of eggs sold is

(A) 12%
(B) 13%
(C) 48%
(D) 52%

Question **14** refers to the following tally chart which represents the favourite colours of some children.

FAVOURITE COLOURS		
Name	**Tally**	**Frequency**
Red	𝍸 𝍸	**10**
Blue		**14**
White	𝍸 ||	**7**
Yellow	𝍸 𝍸	**10**

14. Which tally below correctly shows the number of children whose favourite colour is blue?

(A) 𝍸 ||||
(B) 𝍷 𝍷 ||||
(C) 𝍸 𝍸 ||
(D) 𝍸 𝍸 ||||

15. If X = {even numbers less than 16} and Y = {multiples of 3 less than 20}, then $X \cap Y$ is the set

(A) {6, 12}
(B) {3, 6, 9, 12, 15}
(C) {2, 3, 4, 8, 9, 10, 14, 15, 18}
(D) {2, 3, 4, 6, 8, 9, 10, 12, 14, 15, 18}

16. 42 is **not** a multiple of

(A) 3
(B) 4
(C) 6
(D) 7

17. Which of the following pairs of numbers gives a sum that is prime and a product that is composite?

(A) 2 and 9
(B) 3 and 7
(C) 4 and 8
(D) 5 and 5

18. When rounded off to the nearest hundred dollar, Lisa's annual salary is \$76 900. Which of the following amounts is **most likely** her actual annual salary before it was rounded off?

(A) \$76 750
(B) \$76 754
(C) \$76 819
(D) \$76 859

19. If 1 486 + W = 2 178, then W represents the number

(A) 629
(B) 692
(C) 3 466
(D) 3 664

20. James bought a belt and a wallet. The wallet cost 4 times as much as the belt. If the wallet cost \$1 800, how much did he pay **altogether** for the belt and the wallet?

(A) \$ 450
(B) \$1 350
(C) \$2 250
(D) \$3 600

Question **21** refers to the following pattern.

$$\frac{1}{3},\quad \frac{3}{9},\quad \frac{5}{15},\quad \_\_\_\_\_,\quad \frac{9}{27}.$$

21. The missing fraction in the pattern is

(A) $\frac{6}{21}$

(B) $\frac{6}{18}$

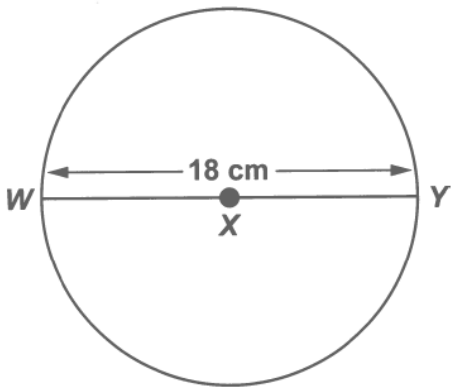
(C) $\frac{7}{21}$

(D) $\frac{8}{24}$

22. Joslene had \$360. She used $\frac{1}{6}$ of her money to buy a chair. How much did she spend on the chair?

(A) \$60
(B) \$72
(C) \$300
(D) \$432

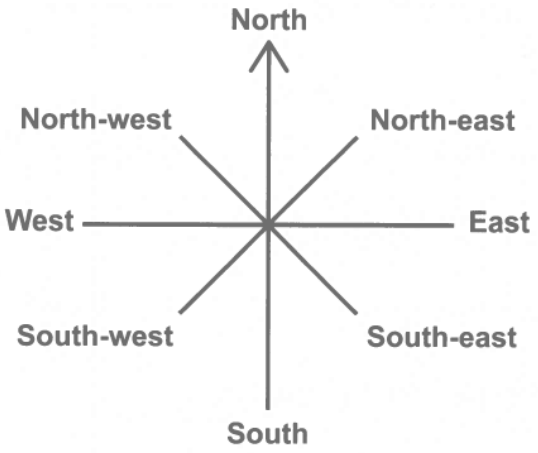
Question **23** refers to the following diagram which shows a circle with the centre marked *X*.



23. If the line *WY* is tripled, what would be the length of the line *XY*?

(A) 17 cm
(B) 27 cm
(C) 45 cm
(D) 54 cm

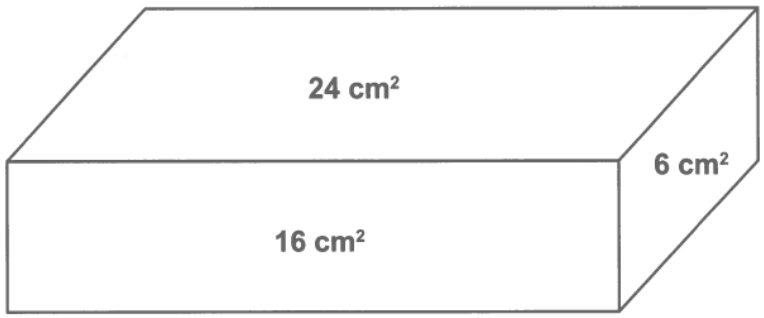
Question **24** refers to the following diagram which shows the points on a compass.



24. Asha is facing north. She turns 45° clockwise and then makes a $\frac{1}{4}$ turn anti-clockwise. Where will she now be facing?

(A) East
(B) West
(C) South-east
(D) North-west

Question **25** refers to the following diagram which shows a cuboid with the area of 3 of its faces given as 24 cm^2, 16 cm^2 and 6 cm^2.



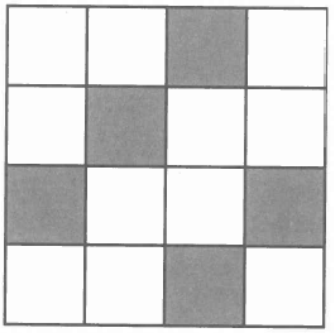
25. The **total** surface area of the cuboid is

(A) 32 cm^2
(B) 48 cm^2
(C) 68 cm^2
(D) 92 cm^2

26. Marcus rented a bicycle from 16:30 hours to 18:00 hours on the same day. If he was charged $50 for every half-hour, how much did he pay?

(A) $ 50
(B) $100
(C) $150
(D) $200

27. The shape below is divided into identical squares.



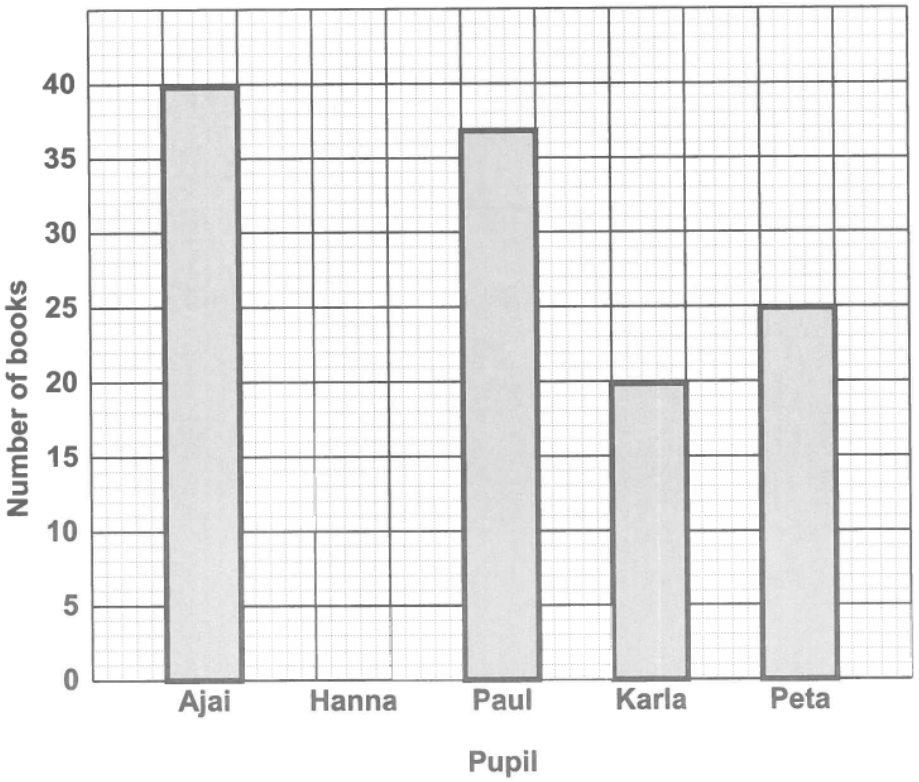
How many **more** squares must be shaded to show that 75% of the whole shape is shaded?

(A) 5
(B) 7
(C) 11
(D) 12

28. A machine can print 200 sheets of pictures in 5 minutes. How many sheets of pictures can it print in one hour?

(A) 1 000
(B) 2 400
(C) 3 000
(D) 12 000

Questions **29 and 30** refer to the following graph which shows the number of books that 4 pupils read during a month. The number of books that Hanna read is not shown.



29. How many more books did Paul read than Karla?

(A) 17
(B) 20
(C) 23
(D) 47

30. If the pupils read 159 books **altogether**, how many books did Hanna read?

(A) 20
(B) 23
(C) 25
(D) 37

GO ON TO THE NEXT PAGE

31. Which of the following pairs of sets is equivalent but **not** equal?

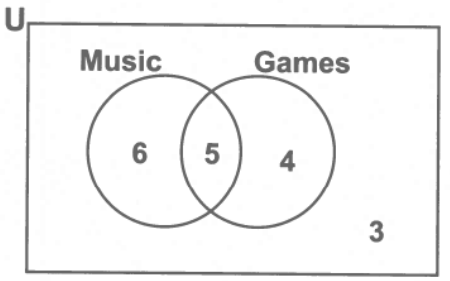
(A) $M = \{4, 8, 12, 16\}$
N = {8, 12, 4, 16}

(B) P = {The set of letters in the word 'plane'}
Q = {The set of letters in the word 'plain'}

(C) X = {red, yellow, orange, blue, green, violet, indigo}
Y = {The colours of the rainbow}

(D) $A = \{1, 2, 3, 4, 5, 6\}$
B = {Natural numbers less than 7}

Question **32** refers to the following Venn diagram which shows 2 activities that a group of Grade 6 pupils engage in during their leisure time.



32. How many pupils listened to music **or** played games during their leisure time?

(A) 6
(B) 9
(C) 11
(D) 15

33. A box of marbles can be shared equally among 3, 6 or 7 persons. How many marbles are likely to be in the box?

(A) 18
(B) 21
(C) 36
(D) 42

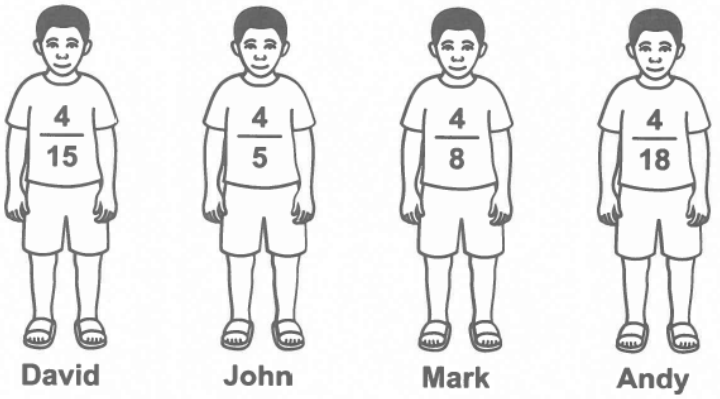
Question **34** refers to the following incomplete table which shows the distances covered by Marlene in 4 races.

Race	1	2	3	4
Distance Covered	_____	80	_____	60

34. The average distance covered by Marlene for the 4 races was 90 m. If she ran 20 m more in Race 3 than in Race 1, what distance did she run in Race 1?

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

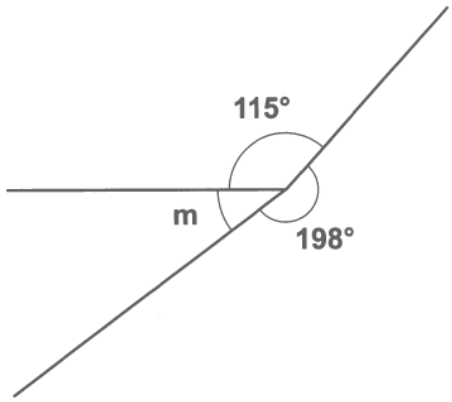
Question **35** refers to the following diagram of 4 boys who receive a quantity of oranges equivalent to the fraction written on their shirts.



35. Each boy receives oranges from different baskets containing the **same** number of oranges. Which boy receives the **most** oranges?

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

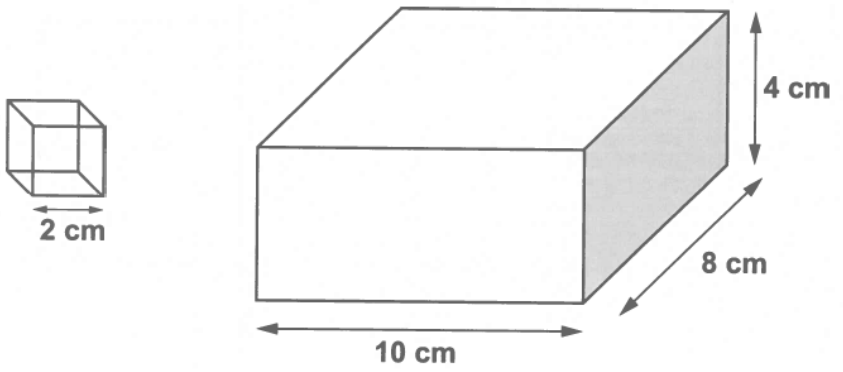
Question **36** refers to the following diagram which shows angles at a point.



36. What is the size of $\angle m$?

(A) 47°
(B) 65°
(C) 162°
(D) 245°

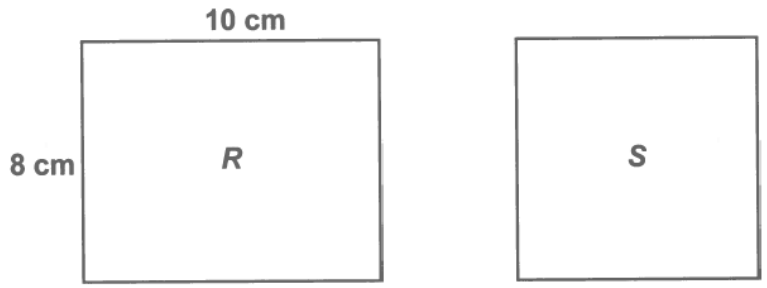
Question **37** refers to the following diagrams which show a cube with sides of length 2 cm, and a closed box that measures 8 cm by 10 cm by 4 cm.



37. How many of the cubes can hold in the box shown above?

(A) 11
(B) 18
(C) 40
(D) 44

Question **38** refers to the following diagrams which show a rectangle and a square.



38. The rectangle, *R*, in the diagram above measures 10 cm by 8 cm and has the same perimeter as the square, *S*. What is the area of *S*?

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

39. Marsha and Alton have marbles in the ratio 5:8 respectively. Alton has 54 more marbles than Marsha. How many marbles does Marsha have?

(A) 18
(B) 27
(C) 90
(D) 144

Question **40** refers to the following table which shows the scores made by 3 batsmen in a cricket match. One of the scores is missing.

Batsman	Score
Shivdas Chatterpaul	47
Kaylen Paul	_____
Pooran Ganesh	53

40. The mean number of runs scored was 55. How many runs did Kaylen Paul score?

(A) 55
(B) 65
(C) 100
(D) 165

END OF TEST

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

DO NOT
WRITE ON
THIS PAGE

DO NOT WRITE ON THIS PAGE

Prepared by

CARIBBEAN EXAMINATIONS COUNCIL