

*Ministry of Education, Human Resource Planning,
Vocational Training and National Excellence*

*Grade 6
National Assessment
June 2, 2023*

TIME: 90 Minutes

DO NOT TAKE THIS PAPER OUT OF THE EXAMINATION ROOM

Mathematics

MATHEMATICS

90 MINUTES

READ THE FOLLOWING INSTRUCTIONS BEFORE ATTEMPTING THE TEST.

1. THIS PAPER CONTAINS SIXTY (60) QUESTIONS.
2. YOU HAVE NINETY (90) MINUTES TO COMPLETE THIS PAPER.
3. FOR EACH QUESTION, SHADE THE LETTER ON THE ANSWER SHEET THAT CORRESPONDS TO THE ANSWER YOU HAVE CHOSEN.

EXAMPLE

1. What is the **place value** of the **6** in the number **65 432**?

- A. Tens of thousands
- B. thousands
- C. hundreds
- D. ones

The correct answer is **tens of thousands**, letter **A**. On your answer sheet you shade



B

C

D

If there is a need to change your answer, erase it and **SHADE** your new answer.

NUMBER CONCEPTS AND OPERATIONS

1. 1 450 rounded to the nearest thousand is
 - A. 2 000
 - B. 1 460
 - C. 1 400
 - D. 1 000

2. Which of the numbers below represents three hundred seventy thousand, four hundred ninety-eight?
 - A. 374 098
 - B. 370 498
 - C. 370 489
 - D. 307 489

3. The lowest common multiple (LCM) of 2, 6 and 7 is
 - A. 12
 - B. 21
 - C. 42
 - D. 84

4. What is the sum of the values of the 7 and the 8 in the number 374 185?
 - A. 78 000
 - B. 70 080
 - C. 70 800
 - D. 7 080

5. Ricky has 36 pencils and Jason has 24 pencils. If they separate their pencils into groups of the same size, what is the largest number of pencils in each group?
 - A. 4
 - B. 6
 - C. 12
 - D. 24

6. Which number below, when rounded to the nearest thousand, becomes 23 000?
- A. 23 410
 - B. 22 410
 - C. 2 310
 - D. 2 290
7. Work out $9\,374 + 694 + 51\,024$
- A. 50 982
 - B. 61 092
 - C. 203 164
 - D. 214 164
8. The population of Roseau is 14,725. The population of Portsmouth is 4 167 and the population of Canefield is 3,324. What is the total population the three communities?
- A. 11 103
 - B. 21 106
 - C. 22 216
 - D. 89 615
9. The total of all odd numbers between 50 and 58 is
- A. 162
 - B. 216
 - C. 266
 - D. 270
10. Subtract 4967 from 7003
- A. 11960
 - B. 3964
 - C. 4967
 - D. 2036

11. When 10 is subtracted from 1 002 the result is
- A. 902
 - B. 992
 - C. 1000
 - D. 1012
12. In a school with 800 students, 437 are boys. How many of the students are girls?
- A. 363
 - B. 437
 - C. 463
 - D. 1 237
13. The sum of four numbers is 76. Three of the numbers are 15, 19 and 22. What is the fourth number?
- A. 20
 - B. 30
 - C. 56
 - D. 132
14. 8 men complete a job in 10 hours. How long will it take 4 men to complete the same job if they worked at the same pace?
- A. 4 hours
 - B. 5 hours
 - C. 8 hours
 - D. 20 hours
15. Calculate 266×33
- A. 8 778
 - B. 8 678
 - C. 7 778
 - D. 299

16. One number is 5. The other number is 7 more than the first. What is their product?
- A. 12
 - B. 17
 - C. 35
 - D. 60
17. $9\ 036 \div 3 =$
- A. 30 012
 - B. 3 021
 - C. 3 012
 - D. 312
18. John is using a bucket to carry sand from one place to another. He needs to move 320 pounds of sand. How many trips would he have to make if each bucket holds 40 pounds of sand?
- A. 360
 - B. 80
 - C. 40
 - D. 8
19. Kim is 4 years older than Bill. Bill is 2 years older than Jamal. Kim is 14. How old are Bill and Jamal?
- A. Bill is 18, Jamal is 20
 - B. Bill is 10, Jamal is 8
 - C. Bill is 8, Jamal is 10
 - D. Bill is 20, Jamal is 18
20. Divide 702 by 3
- A. 2106
 - B. 634
 - C. 334
 - D. 234

21. 857 divided by 12 is
- A. 71 R5
 - B. 71
 - C. 845 R4
 - D. 869
22. $11q = 242$. How much is $1q$?
- A. 24
 - B. 22
 - C. 21
 - D. 12
23. One quarter of a number is 12. What is that number?
- A. 3
 - B. 16
 - C. 36
 - D. 48
24. When one half of 400 is added to 896, the result is
- A. 1296
 - B. 1096
 - C. 496
 - D. 416
25. Calculate $\frac{2}{3}$ of 69
- A. 46
 - B. 23
 - C. 138
 - D. 207
26. Which number below is the largest?
- A. 7.6
 - B. 7.1
 - C. 7.23
 - D. 7.08

27. Timmy scored $7\frac{1}{2}$ over 10 in a test. What was his percentage?

- A. 75%
- B. 70%
- C. $17\frac{1}{2}\%$
- D. 7%

28. Which group is arranged in descending order?

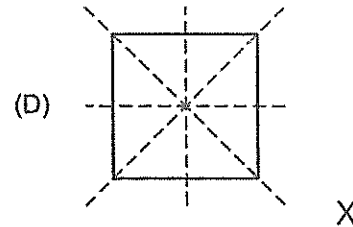
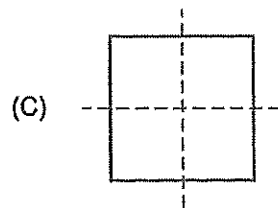
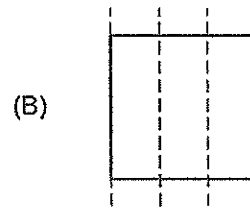
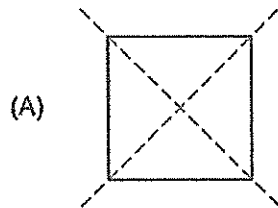
- A. 0.402, 0.42, 0.375, 1.2, 0.85
- B. 0.85, 0.375, 0.402, 0.42, 1.2
- C. 1.2, 0.85, 0.42, 0.402, 0.375
- D. 0.375, 0.402, 0.42, 0.85, 1.2

29. Calculate $9.42 - 5.3$

- A. 14.72
- B. 8.89
- C. 4.39
- D. 4.12

GEOMETRY

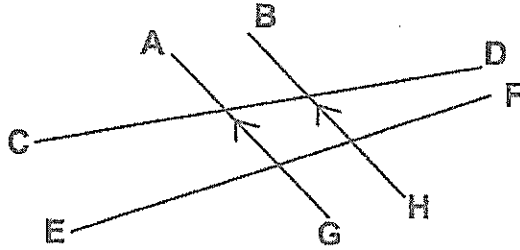
30. Which of the following shows all the correct lines of symmetry on a square?



31. Which of the solids named below has 6 faces, 8 vertices and 12 edges?

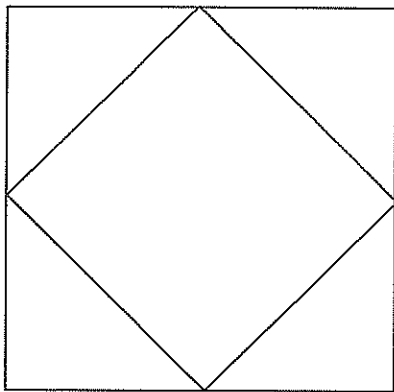
- A. Cube
- B. Prism
- C. Sphere
- D. cylinder

32. Which pair of lines in the diagram below is parallel?



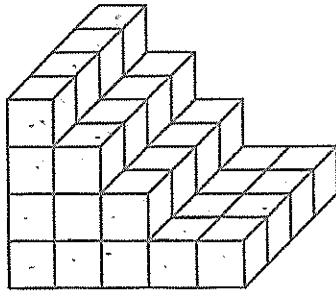
- A. AG and CD
- B. EF and BH
- C. CD and EF
- D. BH and AG

33. How many **right angles** are shown in the shape below?

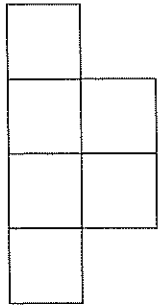


- A. 0
- B. 4
- C. 8
- D. 16

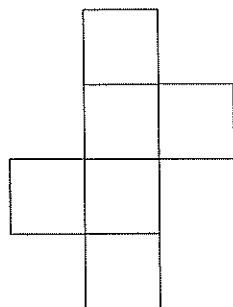
34. How many cubes are used to build the solid in the diagram below?



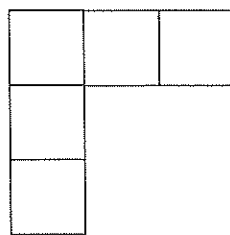
- A. 11
B. 20
C. 26
D. 44
35. Which of these nets can be cut out and folded into a cube?



A



B



C

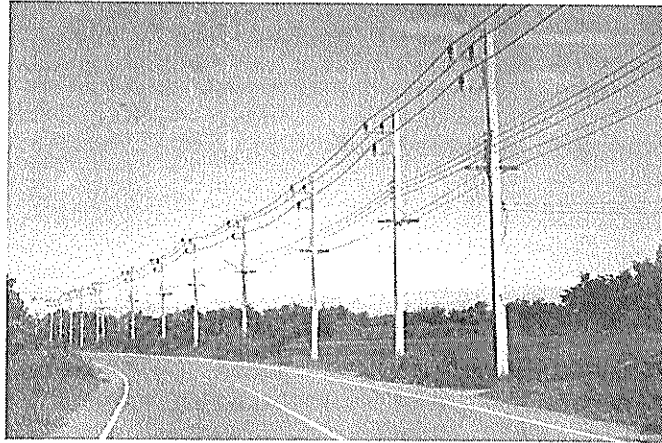


D

MEASUREMENT (15 Questions)

36. Which unit would best be used to measure the area of a football field?
- A. Millimetres
B. Centimetres
C. Metres
D. Kilometres

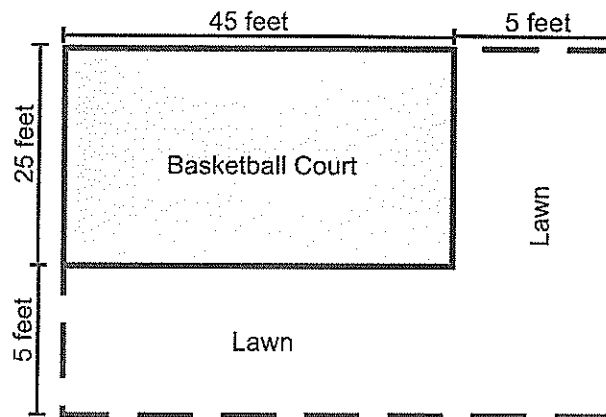
37. DOMLEC is planting poles in a new community. They plant each pole 15 feet apart from each other. If they plant 7 poles along a street, what is the distance between the first and the last poles?



- A. 15 feet
- B. 105 feet
- C. 90 feet
- D. 7 feet

USE THE DIAGRAM BELOW TO ANSWER QUESTIONS 38 AND 39

A community has a lawn around their basketball court as shown in the diagram below.



38. What is the perimeter of the basketball court?

- A. 160 feet
- B. 140 feet
- C. 80 feet
- D. 70 feet

39. Calculate the area of the lawn.

- A. 25 ft²
- B. 375ft²
- C. 1 125 ft²
- D. 1500 ft²

USE THE IMAGE BELOW TO ANSWER QUESTION 40.



40. The garden above is 8 meters wide. The length is 5 metres longer than its width. What is the area of the garden?

- A. 40 metres²
- B. 320 metres²
- C. 104 metres²
- D. 13 metres²



4L



200ml

41. 4 litres of chocolate milk are poured from the bottle shown above into a 200ml glass. How many glasses can be filled from the bottle?
- A. 2
 - B. 20
 - C. 200
 - D. 2000
42. One cake takes $\frac{3}{4}$ hour to bake. A second cake takes 15 minutes longer. What is the baking time for the second cake?
- A. 15 mins
 - B. 45 mins
 - C. 60 mins
 - D. 90 mins
43. At every hour, a cuckoo clock chimes the same number of times as the hour. How many chimes will there be from 9:00am to 12:00pm?
- A. 3
 - B. 9
 - C. 12
 - D. 42
44. Jim took 75 minutes to do a test. Avril took $1\frac{1}{2}$ hours to do the same test. How much longer did it take her to do the test?
- A. 15 minutes
 - B. 75 minutes
 - C. 90 minutes
 - D. $\frac{1}{2}$ hour.

45. The most appropriate unit to be used to measure the mass of a baby would be
- A. milligram
 - B. gram
 - C. meter
 - D. kg
46. If the mass of 1 large mango is 800 grams, how much would 5 such mangoes weigh?
- A. 805 grams
 - B. 5 kilograms
 - C. 4 kilograms
 - D. 4000 kilograms

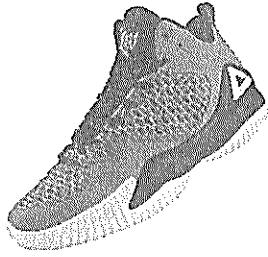
Use the image below to answer questions 47 - 48

John opened his wallet and saw the following notes and coins.

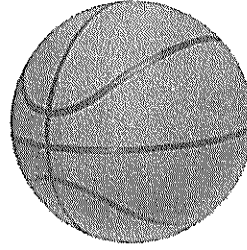


47. How much money did John have in all?
- A. \$186.40
 - B. \$187.80
 - C. \$87.80
 - D. \$86.40

48. John went to the store and bought the following items



\$120.95



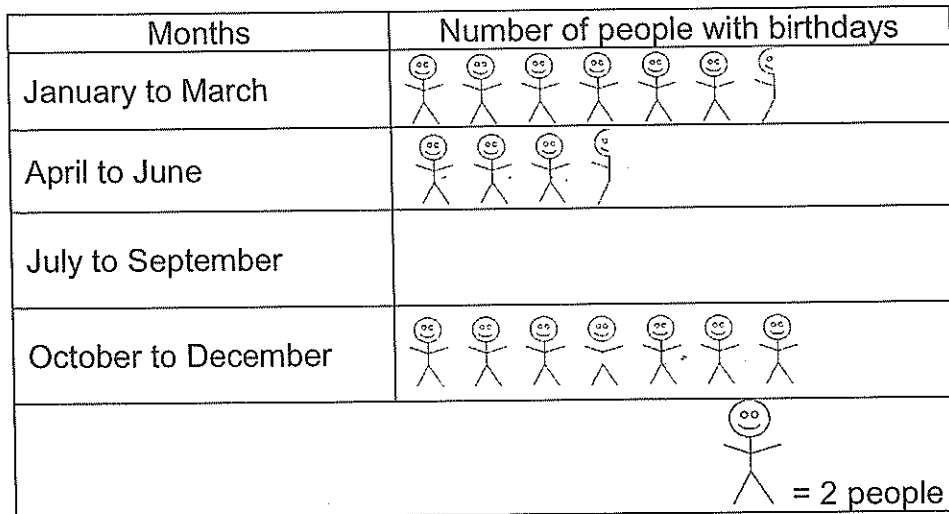
\$55.60

How much money would he have left?

- A. \$176.55
 - B. \$11.35
 - C. \$11.25
 - D. \$0.80
49. The Roseau Primary School raised \$18, 000 to buy new computers for the library. The money was in \$100 bills. How many bills did they have?
- A. 18
 - B. 100
 - C. 180
 - D. 18 000
50. Boboy bought a laptop for \$525.00 and sold it to make a profit of \$380.00. How much did he sell the laptop for?
- A. \$905.00
 - B. \$805.00
 - C. \$265.00
 - D. \$145.00

STATISTICS AND DATA HANDLING (6 Questions)

Grade 6 did a survey on birthday months. The chart below shows the number of children with birthdays in each period (3 months) of the year. Use the chart to answer questions 51 – 53.



51. 18 children had birthdays in July, August and September. How many stick figures should be drawn to represent these people?
- A. 3
B. 9
C. 17
D. 18
52. How many people have a birthday before July?
- A. 3
B. 10
C. 18
D. 20
53. Nobody has a birthday in October. 6 people have a birthday in November. How many people have birthdays in December?
- A. 1
B. 4
C. 6
D. 8

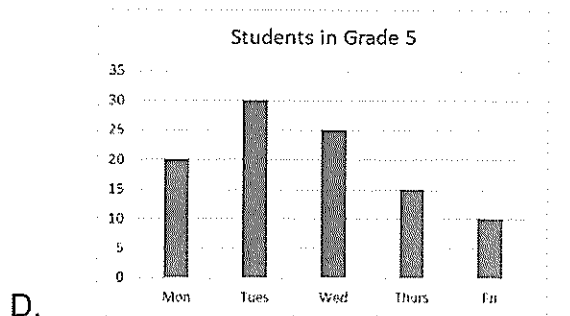
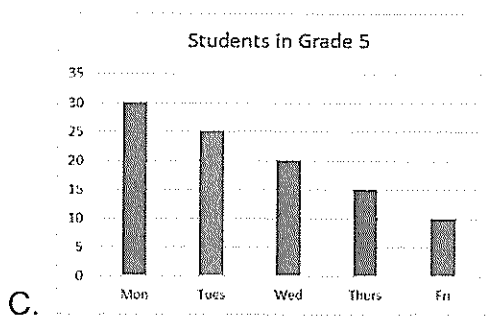
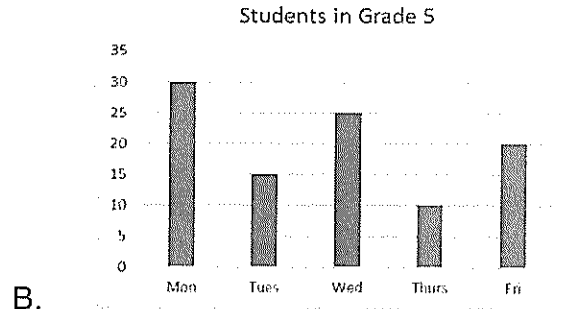
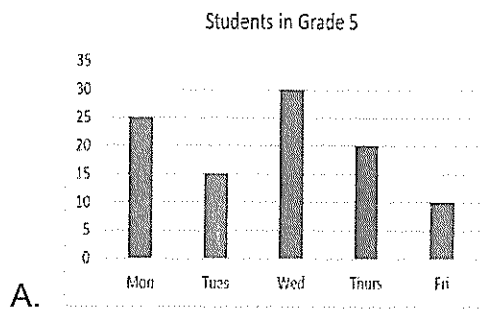
The frequency table shows the daily attendance of students in a Grade 5 class at a school for a week. Use the table to answer questions 54 - 56

| Days of the week | Number of students present |
|------------------|----------------------------|
| Monday | 30 |
| Tuesday | 15 |
| Wednesday | 25 |
| Thursday | 10 |
| Friday | 20 |

54. What is the average daily attendance for the week?

- A. 10
- B. 15
- C. 20
- D. 25

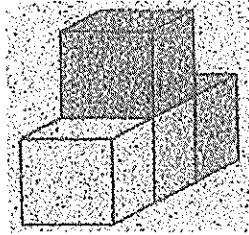
55. Which graph below represents the information given?



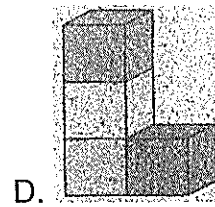
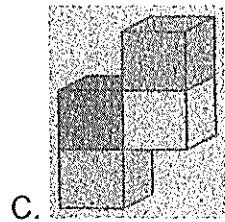
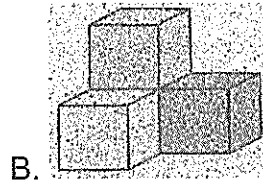
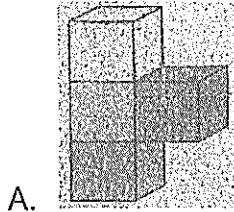
56. Which is the most likely reason for the low attendance on Thursday?

- A. It was a holiday
- B. There was heavy rainfall
- C. The parents had to work
- D. The students had to go to a party

PATTERNS, FUNCTIONS AND ALGEBRA



57. Alvin used 4 cubes to make the shape shown above. Which of the diagrams below shows the same shape?



If

$$Z + Z + Z = 15$$

$$A + A = 14$$

$$P + P + P + P = 12$$

58. What is $Z + A + P$?

- A. 12
- B. 14
- C. 15
- D. 41

The diagram below shows a pattern. Study it then answer question 59.

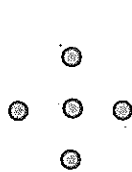


Diagram 1

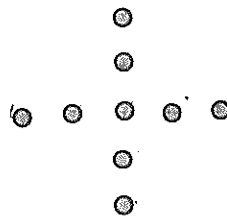


Diagram 2

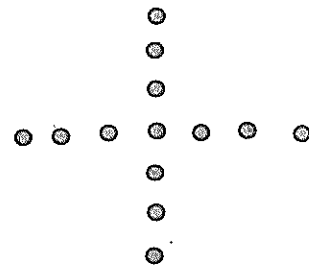


Diagram 3

59. How many dots are needed to draw **Diagram 5**?

- A. 28
- B. 25
- C. 21
- D. 17

60. What number does **X** represent in the pattern below?

3, 7, 15, 31, X

- A. 34
- B. 62
- C. 63
- D. 93

