FILL IN ALL INFORMATION REQUESTED CLEARLY AND LEGIBLY.

TEST CODE

SUBJECT MATHEMATICS

Please place your label here.

READ THE FOLLOWING DIRECTIONS CAREFULLY

1. This test is divided into THREE sections.
2. Make sure you read the instructions before you start to work on any section.
3. Write all your answers in this test booklet.
4. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

WRITE THE NAME OF YOUR SCHOOL BELOW:

WRITE YOUR FULL NAME BELOW:

DATE OF BIRTH

Day Month Year

SEX

MALE ☐ FEMALE ☐

FOLDER NUMBER
Instructions for the Mathematics Test

You are NOT allowed to use calculators.

This test has THREE sections with a total of 45 questions.

SECTION I has 20 questions (Nos. 1-20).

SECTION II has 20 questions (Nos. 21-40).

SECTION III has 5 questions (Nos. 41-45).

You have 75 minutes for this test.

Answer ALL questions.

Read EACH question CAREFULLY before answering it.

Show ALL working.

Marks will be given for correct steps taken.

Work carefully but DO NOT spend too much time on any one question.

DO NOT BEGIN UNTIL YOU ARE TOLD TO DO SO.
Section 1

1. Write in words, the number represented in the place value chart below.

<table>
<thead>
<tr>
<th>Hundreds of Thousands</th>
<th>Tens of Thousands</th>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

_____________________________________________________________________________________
_____________________________________________________________________________________

2. Using the digits 4, 8 and 9, form the smallest number which is a multiple of 6.

Answer: __________________________________________

3. Arrange the following decimal fractions in ascending order.

0.21  0.12  1.2  1.02

Answer: ___________________________________________

4. If \( \frac{1}{7} \) of a number is 20, what is the number?

Answer: ___________________________________________
5. Write 9\% as a decimal fraction.

Answer:____________________________

6. \(8^2 \div 2 = \square \div 4\)

Answer:____________________________

7. \(2463 + 1029 =\)

Answer:____________________________

8. \[\begin{array}{c}
24 \\
2952
\end{array}\]

Answer:____________________________
9. Write the total value of the bills and coins shown below.

Answer: ____________________________________

10. There are 9 pizzas to be shared equally among 4 classes. How much pizza will each class get?

Answer: ____________________________________
11. Point B is 4.6 cm to the right of Point A. Draw an arrow to show the position of Point B.

12. Calculate the mass of the gift-box.

Answer: ________________________________
13. How much time does the Route 3 bus take to complete its journey?

<table>
<thead>
<tr>
<th>BUS SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route Number</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

Answer: _______________________________________________

14. How many 200 ml cups can be completely filled from the jug shown below?

Answer: ____________________________________
15. Write the name of the solid below which has a uniform cross section.

![Diagram of solids: cone, cylinder, pyramid, hexagonal prism]

Answer: _____________________________________________

16. Name the solid which can be formed using ALL the faces below.

![Diagram of solids: triangle, rectangle, hexagonal prism]

Answer: _____________________________________________
17. The arrows show Rachel's path from her house to school.

How many quarter turns does Rachel make to get to school?

Answer: _______________________________________________________


18. Calculate the mean of the following test scores:

42  76  87  53  64  92

Answer: _______________________________________________

19. The table below shows the fruits eaten by students of a Standard 5 class.

<table>
<thead>
<tr>
<th>Fruits</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pineapple</td>
<td>12</td>
</tr>
<tr>
<td>Mango</td>
<td>14</td>
</tr>
<tr>
<td>Orange</td>
<td>14</td>
</tr>
<tr>
<td>Banana</td>
<td>22</td>
</tr>
<tr>
<td>Watermelon</td>
<td>16</td>
</tr>
</tbody>
</table>

Which fruit shows the mode?

Answer: _______________________________________________
20. The table below shows the number of students absent during the last week of school.

<table>
<thead>
<tr>
<th>DAYS</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>⌒⌒⌒</td>
</tr>
<tr>
<td>Tuesday</td>
<td>⌒⌒⌒⌒⌒</td>
</tr>
<tr>
<td>Wednesday</td>
<td>⌒⌒⌒□</td>
</tr>
<tr>
<td>Thursday</td>
<td>⌒⌒⌒⌒⌒</td>
</tr>
<tr>
<td>Friday</td>
<td>⌒⌒⌒⌒⌒□□</td>
</tr>
</tbody>
</table>

How many more students were absent on Friday than on Wednesday?

Answer: ___________________________________________
Section 2

21. On the number line below, A represents \( \frac{1}{4} \), C represents \( \frac{1}{2} \). B is in the middle of A and C. What fraction does B represent?

(3 marks)

Answer: ___________________________________________

22. Roy has 149 marbles. Mike has 45 marbles less than Roy. How many marbles do they have altogether?

(2 marks)

Answer: ___________________________________________
23. A hall has 22 rows of chairs. There are 18 chairs in each row. How many extra rows of chairs are needed to seat 468 persons?

(3 marks)

Answer: ____________________________________________________________________________

24. At a bookstore, 9 copybooks cost $7.20. What is the cost of 2 dozens copybooks?

(2 marks)

Answer: ____________________________________________________________________________
25. There were 399 children at a water park. Thirty-nine girls left by midday. The number of boys was then twice the number of girls. How many girls were there before midday.

(3 marks)

Answer: _____________________________________________

26. Aleem puts a total of 45 toys onto 3 shelves. He puts at least 13 toys on each shelf. Complete the table to show one way he could put the toys onto the shelves.

(2 marks)

<table>
<thead>
<tr>
<th>Shelf</th>
<th>Number of Toys</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>

Answer: _____________________________________________
27. The original price of the bag is $140.00. What is the price after discount?  
(2 marks)

Answer: _____________________________________________

28. Kirstin wants to buy a flute that costs $240. She has saved $20 each week for 3 weeks. How many more weeks does Kirstin need to save money if she continues to save $20 each week?  
(3 marks)

Answer: _____________________________________________
29. Mr. Chin picked a number greater than 100. He told Gabriel to divide the number by 18. He told Edward to divide the number by 15.

Whose answer is greater?

Explain how you know this person's answer will always be greater.

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
(3 marks)

30. Amy borrowed $3000 from a bank at a rate of 12% for 2 years. She repays the bank in equal monthly instalments. How much does she pay each month?

(3 marks)

Answer: _____________________________________________
31. What is the area of the shaded figure?

(2 marks)

Answer: ____________________________________________

32. Andy parks his car from 9:00 a.m. to 12:45 p.m. How much money does he pay for parking?

CAR PARK RATES

$5.00 per hour or any part thereof

(2 marks)

Answer: ____________________________________________
33. Calculate the perimeter of the compound shape.

![Diagram of a compound shape with dimensions: 9cm, 6cm, 2cm, and 10cm.]

Answer: __________________________________________________________________________

34. Mia used 8 m of ribbon to make bows. She used 36 cm to make each large bow and 12 cm to make each small bow. She made an equal number of large and small bows. If she has 32 cm remaining, how many bows did she make?

Answer: __________________________________________________________________________

(3 marks)
35. Draw the next polygon to complete the pattern. (2 marks)

36. Use the shapes given to complete the table below.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Name of shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only 1 pair of parallel sides</td>
<td></td>
</tr>
<tr>
<td>4 equal angles</td>
<td></td>
</tr>
<tr>
<td>4 equal sides</td>
<td></td>
</tr>
</tbody>
</table>

(3 marks)
37. Draw the lines of symmetry on the figure in the grid below.  

(2 marks)

38. The table shows the number of story books read by students of a Standard 5 class.

<table>
<thead>
<tr>
<th>Number of storybooks</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>5</td>
<td>8</td>
<td>15</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

How many students read at least 2 books?  

(2 marks)

Answer: _____________________________________________
39. Fifty-two T-shirts were bought for a Standard 5 class using the house system colours. Complete the pictograph below.  

(2 marks)

<table>
<thead>
<tr>
<th>House Colours</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td><img src="image1" alt="T-shirts" /></td>
</tr>
<tr>
<td>Blue</td>
<td><img src="image2" alt="T-shirts" /></td>
</tr>
<tr>
<td>Green</td>
<td><img src="image3" alt="T-shirts" /></td>
</tr>
<tr>
<td>Yellow</td>
<td><img src="image4" alt="T-shirts" /></td>
</tr>
</tbody>
</table>

represents 4 children
40. The bar graph shows different sports played by students.

On which sport should the principal spend the most money? Give a reason for your answer.

(3 marks)

Answer:
41. Mrs. Pam baked some cupcakes. \( \frac{3}{7} \) of them were vanilla and the rest were chocolate. She sold \( \frac{1}{4} \) of the vanilla and \( \frac{5}{8} \) of the chocolate. She had 150 cupcakes left. How many cupcakes did she bake altogether?

(4 marks)

Answer: ________________________________
42. Mary sold mangoes at $6 each. Customers who bought 2 mangoes from her, were given 1 mango free. No customer bought more than 2 mangoes. At the end of the sale, Mary earned a total of $504 and 30 mangoes were given free. How many customers bought only one mango?

(4 marks)

Answer: _____________________________________________
43. The box below contains some cubes each side measuring 2 cm. How many more cubes of the same size are needed to completely fill the box?

Answer: _____________________________________________
44. (a) Using the grid below, join 4 dots to form a quadrilateral with one pair of parallel lines and only one angle that is smaller than a right angle. Label the shape A.  
(3 marks)

(b) Using the grid, extend the quadrilateral formed in part (a) to make a symmetrical shape.  
(1 mark)
45. Alex was given a 12 cm plant to record its growth over 4 days. The bar graph shows the increase in plant height.

(a) What was the height of the plant on Day 4?

Answer: _____________________________________________

(2 marks)

(b) If the increase in the plant’s height is the same daily, draw the bar to show the increase in height on Day 6.

(2 marks)
END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK BEFORE HANDING IN YOUR PAPER