Education Bureau
Territory-wide System Assessment 2008
Primary 6
Mathematics

Instructions:
1. Stick barcode labels on pages 1, 3, 5, 7 and 9 in the spaces provided.
2. There are 47 questions in this test. Answer all questions.
3. Time allowed is 50 minutes.
4. Write your answers in this Question-Answer Booklet.
5. Do not write in the margins.
6. Use of calculators is not allowed.
7. Do your rough work on the rough work sheet provided.
8. Write your School Code, Class and Class Number in the boxes below.

Instructions for answering questions:
(a) Multiple choice questions – Blacken the circle next to the correct answer with an HB pencil.
For example:

● A
○ B
○ C
○ D

(b) Questions in which you are asked to “Show your working” – Write your mathematical expressions/equations, answers and statements/conclusions in the spaces provided. There is NO need to show your rough work.

(c) Other types of questions – Answer as required in the spaces provided.
1. Write the number 26 003 in words.

Answer: _______________________

2. Which of the following numbers is not a factor of 20?

   O A. 40
   O B. 20
   O C. 10
   O D. 5

3. Which of the numbers is a common multiple of 8 and 12? (circle the answer)

   4 32 60 132 168

4. List all the common factors of 24 and 56.

   Answer: _______________________

5. The Least Common Multiple (L.C.M.) of 4 and 14 is ________.
6. Which of the following figures have \( \frac{1}{4} \) of the whole shaded?

A. 
![Diagram A]

B. 
![Diagram B]

C. 
![Diagram C]

D. 
![Diagram D]

E. 
![Diagram E]

Answer: __________

7. Fill in each of the following boxes with the correct number.

\[
\frac{6}{21} = \frac{2}{\square} = \frac{\square}{35}
\]
8. In the number 730.582,
   (a) the digit ‘8’ is in the _______ place;
   (b) the digit ‘0’ is in the _______ place.

9. Fill in each of the following boxes with the sign ‘>’ (larger than), ‘<’ (smaller than) or ‘=’ (equal to).
   (a) \( \frac{9}{3} \) _______ 3
   (b) \( \frac{2}{3} \) _______ \( \frac{19}{4} \)

10. Change \( 4\frac{3}{7} \) into a decimal and correct the answer to two decimal places.
    Answer: _______

11. When 582 is divided by 16, the quotient is _______ and the remainder is _______.

12. \( \frac{3}{4} - 2\frac{1}{6} = \) _______
13. \[ \frac{12 \frac{1}{4}}{\frac{7}{12}} = \square \]

14. \[ 6 \times 3.2 \times 5.1 = \square \]

15. Calculate 18 \( \div \) 0.7 and correct the answer to two decimal places.
Answer: \[ \square \]

16. Three children buy gifts for their parents. They buy a tie which costs $112 and a pair of earrings which costs $203. How much does each child pay on average?
Answer: Each child pays $ \[ \square \] on average.

17. A bag of nuts weighs \( 1\frac{1}{3} \) kg.
The total weight of \( 5\frac{1}{2} \) bags of nuts is \[ \square \] kg.
18. An adult ticket and five child tickets cost $550 altogether. If one child ticket costs $85, how much does an adult ticket cost? (Show your working)

19. The remaining value on Mary’s stored value card was $24.30. She spent $3.40 on bus fare and then added $50 to the card. What is the new remaining value on her stored value card now?

Answer: The new remaining value is $ __________.

20. A bow needs a ribbon of 8.5 cm long; 12 bows need ______ cm of ribbon.
21. Use a pencil to shade the small squares in the diagram on the right so that the shaded part is 12% of the whole.

22. A factory produces 4,500 toys this month. The number of toys will be reduced by 8% next month. How many toys will the factory produce next month?
(Show your working)

23. A double-deck bus has 40 seats and 27 standees on the lower deck, and 68 seats on the upper deck.

The number of standees is _________ % of the total number of passengers that the double-deck bus can carry.
24. | August |
<table>
<thead>
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<tr>
<td>Sunday</td>
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</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>1</td>
<td>2</td>
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<tr>
<td>5</td>
<td>6</td>
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<td>12</td>
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<td>19</td>
<td>20</td>
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<td>26</td>
<td>27</td>
</tr>
</tbody>
</table>

(a) Fanny has joined a 4-day camp. If the camp ends on the 15th of August, it starts on the ________ of ________.
   (month)

(b) Fanny has enrolled in a chess class which lasts for 12 days. The class starts on the third Tuesday of August, it ends on the ________ of ________.
   (month)

(c) Fanny is a choir member. The first practice session will be held on the 7th of September.
    That day is ____________________.
    (day of the week)

25. The perimeter of a rectangular flowerbed is 40 m.
    Its width is 8 m. What is its length?

Answer: Its length is ________ m.
26. A rectangular piece of paper is 4 cm long and 3 cm wide. It is cut into two parts P and Q as shown below.

Which of the following statements is correct?

- O A. The perimeters of P and Q are equal.
- O B. The perimeter of P is longer than that of Q.
- O C. The perimeter of Q is longer than that of P.
- O D. The perimeters of P and Q cannot be compared.

27. Which of the following tools is most suitable for measuring the results in a long jump competition?

- O A. Trundle wheel
- O B. Metre rule
- O C. Stride length
- O D. Tape measure
28. Which of the following tools is most suitable for measuring the weight of a carton of 250 mL juice?

- O A. A kitchen scale
- O B. A beaker
- O C. A bathroom scale
- O D. A weight scale

29.

(a) Beaker B contains _________ of milk. (give the answer with a unit)

(b) Beaker * A / B (*circle the answer) contains more milk.
30. In the diagram on the right, O is the centre of the circle. What is the circumference? (take \( \pi \) as 3.14)

Answer: The circumference

is _______ cm.

31. In the diagram below, the side of each small square is 1 cm. The area of the shaded part is ____________. 

(give the answer with a unit)
32. The area of the parallelogram below is ______ cm².

![Parallelogram Diagram]

33.

The three solids shown above are made up of ______, and the volume of each ______ is 6 cm³.

Solid *A / B / C (*circle the answer) has the largest volume. Its volume is ______ cm³.

34. How many containers each of volume 500 cm³ can be filled by the water in the beaker?

Answer: ______ containers can be filled.
35. Mr Cheung drives at a speed of 50 kilometres per hour. 
He can travel _______ kilometres in 2\(\frac{1}{2}\) hours.

36. (a) 1 10 can be exchanged for _______ 50 .

(b) 1 100 and 1 50 can be exchanged for _______ 5 .

(c) 20 2 can be exchanged for _______

37. The solid on the right is a pentagonal *pyramid / prism (*circle the answer).
It has _________ faces and _________ vertices.
38. Which of the following quadrilaterals has two pairs of parallel opposite sides, four equal sides and right angles?

- A. Trapezium
- B. Square
- C. Rectangle
- D. Rhombus

39. In the diagram on the right, both PS and RU are diameters.

(a) Which of the following points in the diagram is the centre?

- A. W
- B. X
- C. Y
- D. Z

(b) Measure the length of the radius with a ruler.

Answer: The length of the radius is _____ cm.
40. According to the description of the figures given in the table, write the letter of the figure in each of the blanks.

<table>
<thead>
<tr>
<th></th>
<th>Straight lines</th>
<th>Curves</th>
<th>Parallel lines</th>
<th>Perpendicular lines</th>
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<tr>
<td>(a) Figure ___</td>
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<td>✓</td>
<td>✗</td>
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</tr>
<tr>
<td>(b) Figure ___</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>(c) Figure ___</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
</tbody>
</table>

41. Which angle in the figure on the right is the largest?

- A. Angle $p$
- B. Angle $q$
- C. Angle $r$
- D. Angle $s$
42. Which of the following is an equation?
   - A. \( \frac{16}{4} = 2 + 2 \)
   - B. \( \frac{x}{4} \div 3 \)
   - C. \( 36 \div 4 = 9 \)
   - D. \( 8N + \frac{1}{3} = 19 \)

43. \( 3m + \frac{1}{2} = 6 \)

\[ m = \]

44. A number is divided by 7 and then 14 is added. The sum equals 28. Find the number by the **method of solving equation**.

(Show your working)
45. The following pictogram shows the sales of buns at a bakery last week.

**Sales of Buns at a Bakery Last Week**

Each 🍩 represents 100 buns

<p>| | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit bun</td>
<td>Cream bun</td>
<td>Sausage bun</td>
<td>Wheat bun</td>
<td>Ham bun</td>
</tr>
</tbody>
</table>

(a) The most popular bun sold last week was the ________ bun.
    The number of buns sold was ________ .

(b) The total number of buns sold last week was ________ .

(c) Which type of bun had sales 20% of the total sales of all the buns?

Answer: The ________ bun had sales 20% of the total sales of all the buns.
46. The following bar chart shows sales at Knowledge Bookshop in the last month.

**Sales at Knowledge Bookshop in the Last Month**

- **Fiction**
- **History**
- **Computer**
- **Medicine**
- **Science**
- **Entertainment**

<table>
<thead>
<tr>
<th>Type of Books</th>
<th>Quantity</th>
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<td>Fiction</td>
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</tr>
<tr>
<td>History</td>
<td>200</td>
</tr>
<tr>
<td>Computer</td>
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<tr>
<td>Science</td>
<td>300</td>
</tr>
<tr>
<td>Entertainment</td>
<td>500</td>
</tr>
</tbody>
</table>

(a) The sales of Fiction books were _________ more than that of Entertainment books.

(b) The types of books with the same quantity sold were _________ and _________.

(c) Express the sales of Computer books as a fraction of the total sales of all types of books.

Answer: The sales of Computer books is _______ of the total sales of all types of books.

(d) The type of books with quantity sold less than 350 will be sold at a discount of 10%. According to the data above, which type(s) of books will be sold at a discount of 10%?

Answer: ____________________________
47. Find the average of the following five numbers.

28, 64, 43, 50, 35

Answer: The average is \[ \text{________} \].

— END OF PAPER —