Education Bureau
Territory-wide System Assessment 2010
Primary 6
Mathematics

Instructions:

1. Stick barcode labels on pages 1, 3, 5, 7 and 9 in the spaces provided.
2. There are 44 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:

(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.

School Code  
學校編號  
Class  
班別  
Class No.  
班號  

Write one capital letter in this box
此格只許填寫一個大楷英文字母
1. In the number 90,500, the digit '9' is in the ________________ place.

2. Which of the following numbers is a multiple of 8?
   - O A. 1
   - O B. 4
   - O C. 8
   - O D. 12

3. List all the factors of 81.
   Answer: ________________

4. Fill in each of the following boxes with the correct number.
   (a) \[
   \frac{15}{\text{}} = 3
   \]
   \[
   \text{ } = 3
   \]
   (b) \[
   \frac{15}{\text{}} = 3
   \]
   \[
   15
   \]
5. (a) Within 50, the common multiples of 12 and 24 are ____________.

(b) The Least Common Multiple (L.C.M.) of 12 and 24 is ____________.

6. Which of the following have $\frac{1}{2}$ of the whole figure shaded?

- A. 
- B. 
- C. 
- D. 
- E. 

Answer: ________________
7. (a) Change $\frac{11}{13}$ into an improper fraction.

Answer:

(b) Change $\frac{22}{4}$ into a mixed number.

Answer:

8. Which of the following fractions is the smallest?

$\frac{9}{5}$, $\frac{9}{7}$, $\frac{13}{7}$

Answer:

9. The marks in the following figure are equally spaced. Use a decimal to show the mark pointed by the arrow.

![Diagram with a scale from 0 to 3]

Answer: ________________
10. In the number 647.538, the digit in the hundredths place is _________.

11. Change 0.35 into a fraction and reduce it to the simplest form.
Answer: 

12. Calculate $1.7 \div 3.2$ and correct the answer to two decimal places.
Answer: ____________

13. $218 - 18 \times 7 = ____________$

14. $\frac{4}{6} - \frac{5}{6} = \phantom{0}$

15. $6 \times 9\frac{1}{3} = \phantom{0}$
16. Special Price

$60 for 4 pairs of socks

Mother bought 12 pairs of socks. How much did she pay?

○ A. $15
○ B. $20
○ C. $180
○ D. $240

17. Before the Chinese New Year, Mrs Lee bought $3\frac{1}{3}$ kg of tea for $200.

(a) Each kilogram of tea cost $\_\_\_\_\_\_.

(b) The shopkeeper packed every $\frac{2}{3}$ kg of tea into one bag. How many bags were packed? (show your working)
18. John’s height increases 1.8 cm in 14 weeks.

On average his height increases \[ \frac{1.8}{14} \text{ cm} \] each week. (correct the answer to two decimal places)

19. \[ \text{A Set Meal for Four} \]
\[ \text{Special Price} \]
\[ $378.00 \]

Four tourists ordered a set meal for four.

On average each tourist paid \[ \frac{378}{4} \text{ dollars} \] and \[ \frac{378}{100} \text{ cents} \].

20. Which of the following expressions is most suitable for estimating the value of \[ 2\frac{7}{8} \times 4.2 + 7.09 \]?

- A. \( 2 \times 4 + 7 \)
- B. \( 2 \times 4 + 8 \)
- C. \( 3 \times 4 + 7 \)
- D. \( 3 \times 4 + 8 \)
21. Price of Drinks

<table>
<thead>
<tr>
<th>Drink</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>$12.00</td>
</tr>
<tr>
<td>Tea</td>
<td>$10.50</td>
</tr>
<tr>
<td>Soft drink</td>
<td>$9.50</td>
</tr>
</tbody>
</table>

Jason had $30. He bought two cups of soft drink. With the money left, he can buy

- A. one cup of coffee.
- B. one cup of tea.
- C. two cups of soft drink.
- D. one cup of tea and one cup of soft drink.

22. (a) Change \( \frac{9}{20} \) into a percentage.

Answer: ______ %

(b) Change 236% into a fraction and reduce it to the simplest form.

Answer: ______
23. The capacities of canned soup A and soup B are 320 mL and 400 mL respectively. What percentage of the capacity of soup B is the capacity of soup A? (show your working)

24. The tennis match started at \( \boxed{3:15 \text{ PM}} \).

It was \underline{ } minutes past \underline{ } in the *morning / afternoon (*circle the answer).
25. Kelvin made a calendar but missed out the last week of July.

<table>
<thead>
<tr>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>JULY</td>
</tr>
<tr>
<td>Sunday</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

(a) Fill in the missing days on the calendar above.

(b) Kelvin joined a 7-day camp which started on the last Sunday of June. The day was the _______ of _______.

   (month)

(c) The camp ended on the _______ of _______.

   (month)

26. Fill in each blank with a suitable unit of measurement.

(a) The length of the railway from Hung Hom to Lo Wu is about 42 ______.

(b) The body weight of an adult is about 65 ______.

(c) The capacity of a water bottle is about 400 ______.
27. Which of the following tools is most suitable for measuring the weight of a can of soft drink?

- A.
- B.
- C.
- D.

28. A piece of iron coil is 10 m long. How many rings of diameter 1 m can be made at most?

Answer: _________ rings can be made at most.

29. A triangle is cut away from a piece of square paper. The area of the remaining part is _________ cm$^2$. 
30. In the diagram below, the side of each small square is 1 cm. The area of the shaded part is about ___________. (give the answer with a unit)

31. The solid shown above is made up of ___________. The volume of each is 2 cm$^3$. The volume of the solid is ___________ cm$^3$. 
32. The average speed of a tram is about 30 ____________.
   (write a suitable unit)

33. The average speed of a rocket is 742.5 metres per second.
   In 10 seconds, the rocket travels __________ m.

34.

   (a) Which of the shapes above is/are pentagon(s)? Write the letter(s) for the answer.

   Answer: ______________________

   (b) Which of the quadrilaterals above has/have two pairs of parallel opposite sides? Write the letter(s) for the answer.

   Answer: ______________________
35. A quadrilateral has two pairs of parallel opposite sides. Its four sides are equal. It has no right angle. The quadrilateral is a

- A. rhombus.
- B. rectangle.
- C. trapezium.
- D. square.

36.

PQ and RT are diameters of the circle above.

(a) __________ is the centre of the circle.

(b) In the figure,

* TR / TW / PV / PW / VW / VS

are radii of the circle.

(*circle all the answers)
37. The Map of Country Park

(a) From the Camp Site, Joyce goes bird-watching in the Woodland.

She goes south-west to the __________ and then turns __________ to the Woodland. (direction)

(b) From the Reservoir, Wilson goes to the Waterfall.

Firstly he goes to the __________. After passing the __________, he turns __________ to the Waterfall. (direction)

38. A ticket to a concert costs $80.

$N$ tickets cost $__________.
39. \[ 100P = 2 \]
   \[ P = \]

40. \[ \frac{B}{8} - 7 = 3 \]
   \[ B = \]

41. Tom has $80 pocket money. \( \frac{2}{5} \) of Jack’s pocket money is $10 more than Tom’s. Find Jack’s pocket money by the **method of solving an equation**. (show your working)
42. The following table is the medal record of a joint-school sports event.

<table>
<thead>
<tr>
<th>School</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of medals</td>
<td>51</td>
<td>36</td>
<td>23</td>
<td>19</td>
</tr>
</tbody>
</table>

(a) Round off the number of medals to the nearest tens and complete the above table.

(b) Using 1 symbol to represent 10 medals, construct a pictogram with the data rounded to the nearest tens and give it a suitable title.

(Title)
Each symbol represents 10 medals

School A

School B

School C

School D
43. The following shows the result of a district council election. Each elector can choose one candidate only.

**The Result of District Council Election**

(a) The two candidates who receive the two largest numbers of votes win the election. Their candidate numbers are _________ and ________.

(b) The number of electors who have voted is ________.

(c) The total number of electors in the district is 48 000. The number of electors who have voted is _________ % of the total number of electors in the district.
44. The following tables show the weights of three boys and two girls.

<table>
<thead>
<tr>
<th>Weights of boys</th>
<th>Weights of girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>Mary</td>
</tr>
<tr>
<td>30 kg</td>
<td>29 kg</td>
</tr>
<tr>
<td>John</td>
<td>Ann</td>
</tr>
<tr>
<td>35 kg</td>
<td>33 kg</td>
</tr>
<tr>
<td>Dick</td>
<td></td>
</tr>
<tr>
<td>34 kg</td>
<td></td>
</tr>
</tbody>
</table>

(a) The average weight of the boys is _______ kg.

(b) The average weight of the girls is _______ kg.

(c) The average weight of all the above children is _______ kg.

— END OF PAPER —