Education Bureau  
Territory-wide System Assessment 2013  
Primary 6  
Mathematics

Instructions:
1. Stick barcode labels on pages 1, 3, 5, 7 and 9 in the spaces provided.
2. There are 39 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, 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. Which of the following numbers has the digit ‘0’ in its thousands place?
   - A. 12 340
   - B. 12 304
   - C. 12 034
   - D. 10 234

2. Which of the following numbers is a multiple of 15?
   - A. 5
   - B. 10
   - C. 35
   - D. 60

3. List all the factors of 44.
   Answer: ________________________________

4. The Highest Common Factor (H.C.F.) of 18 and 48 is ________.

5. Fill in the box with the correct number.
   \[
   \square = 1
   \]
   \[
   \frac{7}{\square} = 1
   \]
6. The first common multiple of 6 and 10 is 30.

Which of the following numbers is their third common multiple?

- A. 45
- B. 60
- C. 75
- D. 90

7. What fraction of the whole figure is shaded?

Answer: \[ \frac{\text{white}}{\text{white} + \text{shaded}} \] of the whole figure is shaded.
8. (a) Change $2\frac{3}{8}$ into an improper fraction.

Answer: 

(b) Change $\frac{63}{5}$ into a mixed number.

Answer: 

9. Which of the following fractions is the smallest?

$\frac{4}{11}$, $\frac{8}{11}$, $\frac{4}{15}$

Answer: 

10. Change $\frac{5}{18}$ into a decimal correct to two decimal places.

Answer: 

11. In the number 1.396, which digit stands for the smallest value?

○ A. ‘9’
○ B. ‘6’
○ C. ‘3’
○ D. ‘1’

12. \(10 \div 9 \times 90 = \) ________

13. \(\frac{31}{6} - \frac{2}{9} = \) ________

14. \(\frac{2}{5} \div 4 \times \frac{11}{9} = \) ________

15. \(36.4 + 3.6 - 8.45 = \) ________

16. \(1.1 \times 5 \times 3.4 = \) ________
17. Yesterday, Mr Cheung spent $8\frac{1}{2}$ hours working, $\frac{3}{4}$ hour reading and $1\frac{1}{4}$ hours doing sport.

How many hours did he spend on these three activities altogether?

(Show your working)

18.

The rectangle above is made up of 4 square cards.

(a) The side of a square is _________ cm.

(b) The perimeter of the rectangle is _________ cm.
19. A teacher bought 200 chocolates. Each chocolate weighs 2.5 g. She divides the chocolates equally into 10 packets. What is the weight of each packet? (Show your working)

20. (a) Change 160% into a decimal.
   Answer: __________
   (b) Change 3.2 into a percentage.
   Answer: __________ %

21. A department store has 200 employees and 60% of them are female.
   (a) __________ % of the employees are male.
   (b) There are __________ female employees in the department store.
22. (a) The clock in the hall showed the time when the guest started his speech. The time was ________ minutes past/to ________ in the afternoon. (*Circle the answer)

(b) The guest finished his speech after 40 minutes. In 24-hour time, the time was ________ : ________ .

23. Fill in the following blanks with suitable units.

(a) The capacity of a soft drink bottle is about 500 ____________ .

(b) A drinking straw is about 25 ____________ long.

(c) A bottle of soft drink weighs about 600 ____________ .
24. Study the diagrams above. Which of the following is correct?

- A. \(\square\) and \(\square\) weigh the same.
- B. \(\square\) is heavier than \(\square\).
- C. \(\square\) is lighter than \(\square\).
- D. The weights of \(\square\) and \(\square\) cannot be compared.
25. (a) Fill up Bottle A with water. Then pour all the water into a beaker.

The capacity of Bottle A is _________ mL.

(b) Fill up Bottle B with water. Then pour all the water into a beaker.

The capacity of Bottle B is _________ L.

(c) The capacity of Bottle A is

* larger than / equal to / smaller than

the capacity of Bottle B. (* Circle the answer)

26. A plastic tape is 440 cm long. How many plastic rings of diameter 7 cm can be made? (Take $\pi$ as $\frac{22}{7}$)

Answer: _________ plastic rings can be made.
27. The figure above is a parallelogram.
   Its area is __________ cm².

28. The average cycling speed of Polly is
   about 15 _____________.
   (Write a suitable unit)

29. The figure above is a hexagonal * pyramid / prism.
   (* Circle the answer)
   It has __________ edges.
30. 

(a) Which of the 2-D shapes above is a rhombus?  
(Write the letter for the answer) 

Answer: ______________

(b) In the figure above, the triangle with two equal sides is ____________ .  
(Write the letter for the answer) 

It is * an isosceles / a right-angled / an equilateral triangle.  
(* Circle the answer)
31. In the figure below, line XY is the diameter of the circle. OX and OY are lines of equal length.

(a) Point O is

○ A. a radius.
○ B. the centre.
○ C. a diameter.
○ D. the circumference.

(b) The three lines XY, YZ and ZX in the circle form

* an isosceles / a right-angled / an equilateral triangle.

(* Circle the answer)
32. Study the following 2-D shapes. Write the letter(s) for the answer.

- A
- B
- C
- D

(a) Which of the 2-D shapes above has / have parallel lines?
Answer: _____________

(b) Which of the 2-D shapes above has / have perpendicular lines?
Answer: _____________

33. Which of the following stands for ‘y is divided by 5 and then 2 is subtracted from the result’?

- A. \(\frac{y}{5} - 2\)
- B. \(\frac{y - 2}{5}\)
- C. \(\frac{y}{5 - 2}\)
- D. \(\frac{5}{y} - 2\)
34. Map of Sports City

(a) Vivian goes ___________ from Badminton Court to Football Field. Then she turns ___________ to reach Flower Bed.

(b) Canteen is to the south-west of _________________.

(c) After having a meal in Canteen, Bill goes ___________ to Football Field.
35. \[ 21y = 7 \]
   \[ y = \]

36. **1-Day Tour to Geology Park**
   
   **Fee**
   
   Adult: $260 each
   Child: \( \text{each} \)

The fee of an adult is $40 more than that of 2 children.

Find the fee of a child by the *method of solving an equation*. (Show your working)
37. The points gained by four online game players are shown below.

<table>
<thead>
<tr>
<th>Player</th>
<th>Adam</th>
<th>Tina</th>
<th>David</th>
<th>Susan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>600</td>
<td>400</td>
<td>300</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the information in the table above, construct a pictogram and give it a title.

(Title)

Each ○ stands for 100 points
38. Mr Wong did a survey on the ‘favourite ball games of P.6 pupils’. He drew the following bar chart according to the data.

(a) The most popular ball game of P.6 pupils is ________________ .

(b) The total number of pupils taking part in this survey is __________ .

(c) The number of P.6 pupils who liked table tennis most is _______ * more / less than that of basketball. (* Circle the answer)
39. Find the average of the five numbers below.

\[20, 19.5, 100, 10\frac{1}{2}, 100\]

Answer: The average is \[\underline{______}\].