Education Bureau
Territory-wide System Assessment 2015
Primary 6
Mathematics

Instructions:
1. Stick barcode labels on pages 1, 3, 5, 7 and 9 in the spaces provided.
2. There are 40 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.

<table>
<thead>
<tr>
<th>School Code (學校編號)</th>
<th>Class (班別)</th>
<th>Class No. (班號)</th>
</tr>
</thead>
</table>

Write one capital letter in this box.
1. Which of the following numbers has the digit ‘6’ in its thousands place?

   - A. 26.015
   - B. 260.15
   - C. 2601.5
   - D. 26015

2. 42 is a factor of

   - A. 3.
   - B. 7.
   - C. 21.
   - D. 84.

3. List all the factors of 25.

   Answer: ________________________________

4. The Least Common Multiple (L.C.M.) of 4 and 46 is ________.

5. \(\frac{17}{18}\) is * smaller than / equal to / larger than \(\frac{16}{16}\).

   (*Circle the answer)
6. The first common multiple of 12 and 20 is 60.

Which of the following numbers is their third common multiple?

- A. 4
- B. 120
- C. 180
- D. 240

7. Use a pencil to shade the figure below so that the shaded part is \( \frac{7}{10} \) of the whole figure.
8. (a) Change $\frac{11}{30}$ into an improper fraction.

Answer: 

(b) Change $\frac{65}{9}$ into a mixed number.

Answer: 

9. Which of the following fractions is the smallest?

(Circle the answer)

$\frac{17}{15}$, $1\frac{1}{5}$, $\frac{17}{8}$

10. Change 3.65 into a fraction and reduce it to the simplest form.

Answer: 

11. In the number 3.076, what is the value represented by the digit ‘7’?  

<p>| | | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>70</td>
<td>7/10</td>
<td>7/100</td>
<td>7/1000</td>
</tr>
</tbody>
</table>

12. $10 \div 6 \times 42 = \square$

13. $50 \times (24 + 16) = \square$

14. \[
\frac{1}{6 \frac{1}{7}} - \frac{1}{5 \frac{1}{9}} = \square
\]

15. \[
\frac{4 \frac{2}{3}}{3 \frac{1}{7}} = \square
\]

16. $20 \times 1.4 \times 0.9 = \square$

17. $9.05 \div 0.5 = \square$
18. Mother bought 5 litres of juice. Peter drank $1\frac{1}{4}$ litres and John drank $\frac{3}{5}$ litre. How many litres of juice were left? (Show your working)

19. Goods at a sports shop are on sale. The original price of a ball was $150. The price is $135 now.

   The ball will be sold at ________ % of its original price.
20. Kitty mixes 1.25 L of pineapple juice and 2.6 L of orange juice. Then she pours the juice equally into 7 bottles. How much juice does each bottle contain? (Show your working)

21. (a) Change 1.5% into a decimal.
   Answer: ___________

(b) Change 0.304 into a percentage.
   Answer: ___________ %
22. 

(a) The clock above shows the time Jenny arrived at the cinema.

The time was ________ minutes past ________ in the afternoon.

(b) The film started at 5:15 pm.

In ‘24-hour time’, the time was ________ : ________.

(c) Jenny arrived at the cinema ________ minutes * earlier / later than the time the film started.

(*Circle the answer)

23. Betty bought a pizza. She ate three-fifths of it.

She ate __________ % of the whole pizza.
24. Green Company buys 30.5 kilograms of plastic bottles for 122 dollars.

Each kilogram of plastic bottles costs _______ dollars on average.

25. Charles made a phone call to Hong Kong for 4.8 minutes from overseas. He should pay $50.80.

Which of the following expressions is most suitable for estimating the fee (in dollars) per minute on average?

- A. 50 ÷ 4
- B. 50 ÷ 5
- C. 60 ÷ 4
- D. 60 ÷ 5
26. (a) Fill up a ladle with water and then pour all the water into a beaker.

The capacity of a ladle is ___________ mL.

(b) Fill up a cup with water and then pour all the water into a beaker.

The capacity of a cup is ___________ L.

(c) The capacity of a cup is ___________ mL

* more / less than the total capacity of 4 ladles.

(*Circle the answer)
27. The rectangle below is made up of square A and triangles B and C.

(a) The area of A is _______ cm\(^2\).
(b) B is * an isosceles / an equilateral / a right-angled triangle.
   (*Circle the answer)
(c) The total area of B and C is _______ cm\(^2\).

28.

The figure above is a prism.

It has ___________ faces and ___________ edges.
29. Among the figures above, the triangle with only two equal sides is ________________ .

(Write the letter for the answer)

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

(*Circle the answer)

30. The average speed of the Peak Tram is about

15 ________________ . (Give a suitable unit)
31. In the figure above, point O is the centre of the circle.

(a) The straight lines OY, YZ and ZO form
* an isosceles / a right-angled / an equilateral triangle.
(*Circle the answer)

(b) Which of the straight lines below is a diameter?

○ A. PY
○ B. XY
○ C. YZ
○ D. ZO

32. A rhombus has ______ equal sides and ______ pair(s) of opposite sides parallel.
33. Study the following 2-D shapes. Write the letter(s) for the answer.

List:
(a) Figure(s) having curves only: ________________
(b) Figure(s) having straight lines and curves: __________________

34. Judy has 120 dollars of pocket money. She spends $y$ dollars each day. How much does she still have after one week?

○ A. $120 - 7y$
○ B. $7y - 120$
○ C. $120 - \frac{y}{7}$
○ D. $(120 - y) \times 7$
35. The map of Food Court is shown below.

(a) Starting from Restaurant, Peter goes __________ (direction) to reach Snack Street. Then he turns __________ (direction) to reach Cafe.

(b) Cafe is to the north-east of ________________.

(c) Sushi Bar is to the ________________ of Restaurant. (direction)
36. \[96y = 48\]

\[y = \]

37. Andy bought some sushi and an ice-cream cone for 60 dollars. Find the number of pieces of sushi he bought by the method of solving an equation. (Show your working)
38. The following table shows the number of books read by Primary Six pupils in the first term.

<table>
<thead>
<tr>
<th>Kinds of books</th>
<th>Cartoon</th>
<th>Fable</th>
<th>Fiction</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of books</td>
<td>200</td>
<td>400</td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

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

(Title)

Each \( \boxed{\text{II}} \) stands for 100 books

Kinds of Books

Cartoon  Fable  Fiction  Others
39. A sports shop conducted a survey on the sales of different kinds of goods last week. The result is shown in the following bar chart.

**Sales of Different Kinds of Goods Last Week**

<table>
<thead>
<tr>
<th>Goods</th>
<th>Sales (pieces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports Shoes</td>
<td>80</td>
</tr>
<tr>
<td>Rucksack</td>
<td>60</td>
</tr>
<tr>
<td>Cap</td>
<td>40</td>
</tr>
<tr>
<td>Sportswear</td>
<td>50</td>
</tr>
<tr>
<td>Swimsuit</td>
<td>100</td>
</tr>
</tbody>
</table>

(a) The sales of ________ were the most. ________ pieces were sold.

(b) The sales of rucksacks were ________ times the sales of sportswear.

(c) The sales of caps were ________ pieces
   * more / less than the sales of swimsuits.
   (*Circle the answer)
40. Peter joined a singing contest. Five judges gave him the following scores:

7, 8, 9, 9, 10

Peter’s average score was ________________ .