Education Bureau
Territory-wide System Assessment 2010
Secondary 3
Mathematics
ANSWER BOOKLET

INSTRUCTIONS
1. Write your School Code, Class and Class Number in the boxes provided on this page.
2. Stick barcode labels in the spaces provided on page 1 and page 3.
3. The time allowed is 65 minutes.
4. Write ALL your answers in the spaces provided in this ANSWER BOOKLET.
5. Do not write in the margins.
6. Unless otherwise specified, numerical answers should be either exact or correct to 3 significant figures.
7. The use of HKEAA approved calculators is permitted.
8. Rough work should be done on the rough work sheet provided.

School Code

Class 3
Class No.

Write one capital letter in this box.
SECTION A: Multiple Choice Questions

MC Questions – Blacken the circle under the correct answer with an HB pencil. For example:

A  B  C  D
●  ○  ○  ○

1. A  B  C  D
   ○  ○  ○  ○

2. A  B  C  D
   ○  ○  ○  ○

3. A  B  C  D
   ○  ○  ○  ○

4. A  B  C  D
   ○  ○  ○  ○

5. A  B  C  D
   ○  ○  ○  ○

6. A  B  C  D
   ○  ○  ○  ○

7. A  B  C  D
   ○  ○  ○  ○

8. A  B  C  D
   ○  ○  ○  ○

9. A  B  C  D
   ○  ○  ○  ○

10. A  B  C  D
    ○  ○  ○  ○
11. A B C D
   ○ ○ ○ ○
12. A B C D
   ○ ○ ○ ○
13. A B C D
   ○ ○ ○ ○
14. A B C D
   ○ ○ ○ ○
15. A B C D
   ○ ○ ○ ○
16. A B C D
   ○ ○ ○ ○
17. A B C D
   ○ ○ ○ ○
18. A B C D
   ○ ○ ○ ○
19. A B C D
   ○ ○ ○ ○
20. A B C D
   ○ ○ ○ ○
SECTION B: Write your answers in the spaces provided. Working need not be shown.

21. \( \frac{12}{3(-2)} = \) ____________

22. Circle the correct answers: (i) Exact value / Estimated value (ii) Exact value / Estimated value

23. Circle the correct answers: (i) Rate / Ratio (ii) Rate / Ratio


25. Inequality: ________________

26. The value of the 7th term of the sequence is ________________.

27. \((2a^2 + 3ab) - (a^2 - ab) = \) __________________

28. \(x = \) ____________ , \(y = \) ____________

29. \((2x - 5)^2 = \) __________________

30. \(2x^2 + 5x - 3 = \) __________________

31. Inequality: ________________

32. The angle between the plane \(VAB\) and the plane \(ABCD\) is ________________.

33. ________________
34. Diagram of a cuboid:

35. 

36. (a) \( x = \) ______________
    (b) \( y = \) ______________

37. __________________

38. The polar coordinates of point \( B \) are (_______, _______).

39. The length of \( AB \) is ______________.

40. (a) Brand _____ has the highest sales.
    (b) The sales of brand A are _____ cans.
    (c) The sales of brand B are _____ cans.

41. The arithmetic mean of the monthly profits is $__________.
42. The mean number of books borrowed by each student is _______.

43. The probability that Mrs Tang has only one boy is _______.

SECTION C: Answer in the spaces provided.
All working and conclusions must be clearly shown.

44. 

45. 

46. \( y = \frac{2 - x}{2} \)

<table>
<thead>
<tr>
<th>( x )</th>
<th>(-2)</th>
<th>(0)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

47. (Blank lines)

48. \begin{tabular}{|c|c|}
    \hline
    \textbf{Number of books borrowed} & \textbf{Frequency} \\
    \hline
    1 – 8    & 4     \\
    9 – 16   &       \\
    17 – 24  &       \\
    25 – 32  &       \\
    33 – 40  &       \\
    41 – 48  &       \\
    \hline
\end{tabular} \quad \begin{tabular}{|c|c|}
    \hline
    \textbf{Number of books borrowed} & \textbf{Frequency} \\
    \hline
    1 – 12    &       \\
    13 – 24   &       \\
    25 – 36   &       \\
    37 – 48   &       \\
    \hline
\end{tabular}