# Education Bureau <br> Territory-wide System Assessment 2010 <br> Secondary 3 <br> Mathematics <br> <br> ANSWER BOOKLET 

 <br> <br> 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.


## SECTION A: Multiple Choice Questions

MC Questions - Blacken the circle under the correct answer with an $H B$ pencil. For example :
$\begin{array}{llll}\text { A } & \text { B } & \text { C } & \text { D } \\ - & \text { O } & \text { O } & \text { O }\end{array}$

1. $\mathrm{A} \quad \mathrm{B} \quad \mathrm{C}$
$\bigcirc \bigcirc \bigcirc \bigcirc$
2. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
3. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
4. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
5. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
6. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
7. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
8. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
9. A B C D
$\bigcirc \bigcirc \bigcirc \bigcirc$
10. A B C D
$\bigcirc \bigcirc \bigcirc$
Please do not write in the margin.


SECTION B: Write your answers in the spaces provided. Working need not be shown.
21. (i) $\qquad$ ${ }^{\circ} \mathrm{C}$
(ii) $\qquad$ ${ }^{\circ} \mathrm{C}$
22. $(-2)[(-6)+(-3)(4)]=$ $\qquad$
23. The percentage increase of the price is $\qquad$ $\%$.
24. Joseph gets $\qquad$ banknotes.
25. $80,-40,20,-10$, $\qquad$ , $\qquad$ , ...
26. The degree of the polynomial is $\qquad$ .
27. $9 a b^{2}-15 a^{2} b=$ $\qquad$
28. $\qquad$
29. $(x+2 y)(x-2 y)=$ $\qquad$
30. $x=$ $\qquad$
31. The solution of the inequality $3 x+1 \geq 10$ is $\qquad$ .
32. The height of the cylinder is $\qquad$ cm .
33. Circle the correct answers: (i) volume / surface area / total sum of lengths
(ii) volume / surface area / total sum of lengths
34.

Diagram of a cuboid :
35.
36. $\angle B C D=$ $\qquad$
37. The length of $D F$ is $\qquad$ cm .
38. $x=$ $\qquad$
39. The area of parallelogram $A B C D$ is $\qquad$ sq. units.
40. The horizontal distance $A C$ is $\qquad$ m.
41. Circle the correct answers: (i) Discrete data / Continuous data
(ii) Discrete data / Continuous data
42. (a) At $\qquad$ the air temperature of Shatin was the lowest.
(b) The difference between the lowest and the highest temperature was
$\qquad$ ${ }^{\circ} \mathrm{C}$.
(c) At $\qquad$ , Shatin had the biggest increase in temperature compared to the temperature one hour before.
43. The mode is $\qquad$ .

Please do not write in the margin.

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

44. $\qquad$
45 $\qquad$
45. $\qquad$
46. $y=\frac{2-x}{2}$

| $x$ | -2 | 0 | 2 |
| :--- | :--- | :--- | :--- |
| $y$ |  | 1 |  |


|  |  |  |  |  |  | $y$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 4 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 3. |  |  |  |  |  |  |
|  |  |  |  |  |  | 2 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | $\rightarrow x$ |
|  | -3 |  |  | - |  | O |  |  |  | 2 |  |  |
|  |  |  |  |  |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | $2-$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | -3 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 4 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

48. 


49.

Please do not write in the margin.

51.

| Table 1 |  |
| :---: | :---: |
| Number of books <br> borrowed | Frequency |
| $1-8$ | 4 |
| $9-16$ |  |
| $17-24$ |  |
| $25-32$ |  |
| $33-40$ |  |
| $41-48$ |  |


| Table 2 |  |
| :---: | :---: |
| Number of books <br> borrowed | Frequency |
| $1-12$ |  |
| $13-24$ |  |
| $25-36$ |  |
| $37-48$ |  |

52. The number of gifts that can be bought by Terence is $\qquad$ .
Reason:
$\qquad$

## END OF PAPER

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