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**Education Bureau**  
**Territory-wide System Assessment 2016**  
**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**

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**Class**

<b>3</b>	
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**Class No.**

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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

○ ○ ○ ○

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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

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SECTION B: Write your answers in the spaces provided. Working need not be shown.

21. (i) The time difference is represented by \_\_\_\_\_ hours.

(ii) The time difference is represented by \_\_\_\_\_ hours.

22. \_\_\_\_\_

23. Amy takes \_\_\_\_\_ hours to walk 18 km.

24.  $x =$  \_\_\_\_\_

$y =$  \_\_\_\_\_

25. The value of the 12<sup>th</sup> term of the sequence is \_\_\_\_\_ .

26. \_\_\_\_\_

27.  $x =$  \_\_\_\_\_

28. \_\_\_\_\_

29.  $K =$  \_\_\_\_\_

30. \_\_\_\_\_

31. The side length of the cube is \_\_\_\_\_ cm.

32. \_\_\_\_\_

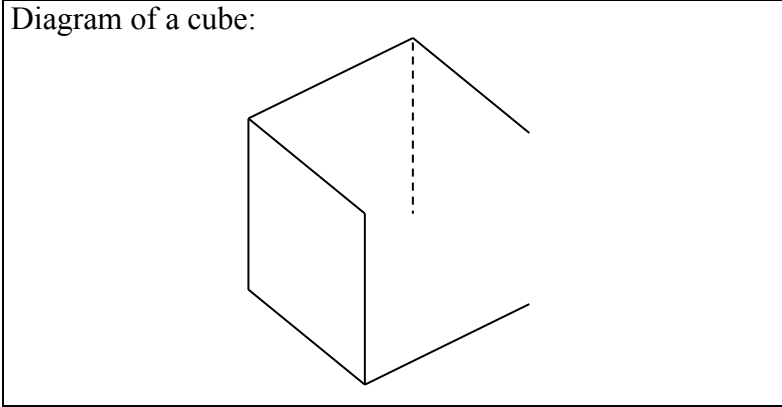
33.  $x =$  \_\_\_\_\_

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34. Diagram of a cube:



35. The polar coordinates of point  $A$  are ( \_\_\_\_\_ , \_\_\_\_\_ ).

36.  $\theta =$  \_\_\_\_\_

37. (     )  $\rightarrow$  (     )  $\rightarrow$  (     )  $\rightarrow$  (     )

38. (a) There are \_\_\_\_\_ sunflowers in the garden.

(b) The mode of the heights of the sunflowers is \_\_\_\_\_ cm.

(c) \_\_\_\_\_ sunflowers in the garden are over 40 cm in height.

39. The required empirical probability = \_\_\_\_\_

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

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43.

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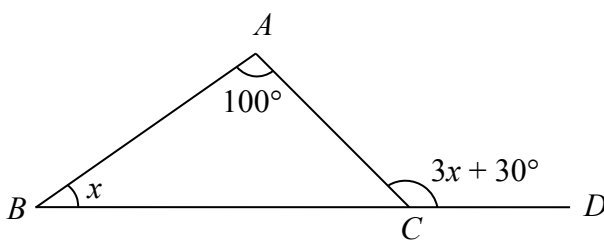
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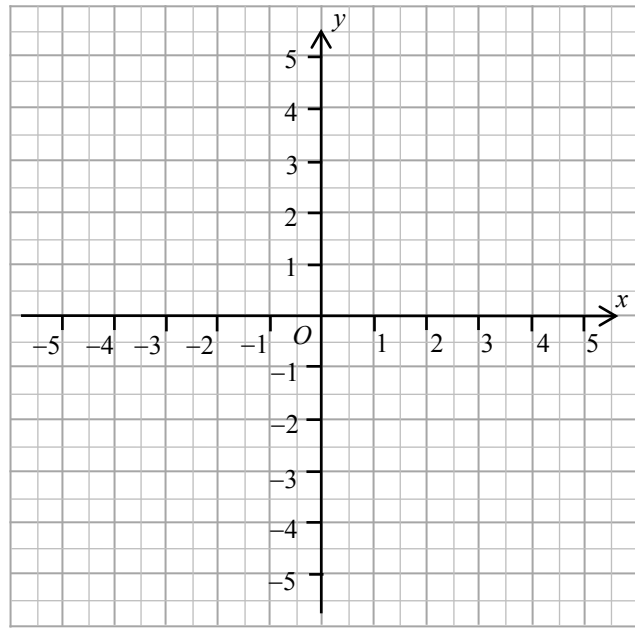
A triangle with vertices  $A$ ,  $B$ , and  $C$ . The interior angle at vertex  $A$  is  $100^\circ$ . The interior angle at vertex  $B$  is  $x$ . The interior angle at vertex  $C$  is  $3x + 30^\circ$ . The side  $BC$  is extended to point  $D$ , forming a linear pair with the interior angle at  $C$ .

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44.  $x + 3y - 3 = 0$

$x$	-3	0	3
$y$	2		



45.

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46.

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47.

Table 1	
Time taken (s)	Frequency
51 – 60	
61 – 70	9
71 – 80	

Table 2	
Time taken (s)	Frequency
51 – 55	
56 – 60	5
61 – 65	
66 – 70	4
71 – 75	
76 – 80	

END OF PAPER

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