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Please stick the barcode label in the box.

Education Bureau
Territory-wide System Assessment 2022
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. 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**

S			
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Class

3	
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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

○ ○ ○ ○

Please do not write in the margin.

Please do not write in the margin.

Please stick the barcode label in the box. →



Please do not write in the margin.

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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Please do not write in the margin.

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

21. _____

22. $R =$ _____

23. The ratio of the number of shaded equilateral triangles to that of the white ones
= _____

24. _____

25. _____

26. _____

27. _____

28. *Circle the correct answer

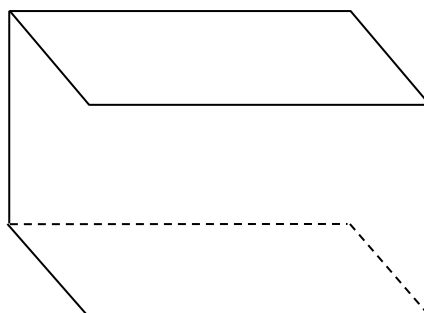
* exact solution / approximate solution

29. $c =$ _____

30. $\frac{11}{8}$ $\frac{11}{9}$

31. The surface area of the sphere is _____ cm^2 .

32. Diagram of a cuboid



Please do not write in the margin.

33. *Circle the correct answer

(a) * $\triangle ABE \cong \triangle ACD$ / $\triangle ABE \sim \triangle ACD$

(b) * SSS / SAS / 3 sides proportional / ratio of 2 sides, included angle

34. $x =$ _____

35. _____

36. $x =$ _____

37.

Table 1	
Number of passengers	Frequency
10 – 29	
30 – 49	9
50 – 69	

Table 2	
Number of passengers	Frequency
10 – 19	
20 – 29	2
30 – 39	
40 – 49	4
50 – 59	
60 – 69	1

38. The modal class of the age of the 150 members is

_____ years old – _____ years old.

39. (a) The weight of Jack is _____ kg .

(b) There are _____ students of height over 170 cm .

(c) There are _____ students in class 3A.

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

40.

41.

$x + y - 1 = 0$

x	-3	0	3
y		1	

42.

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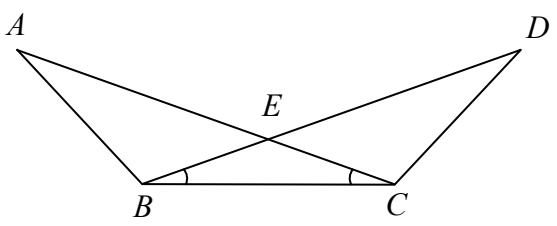
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43.

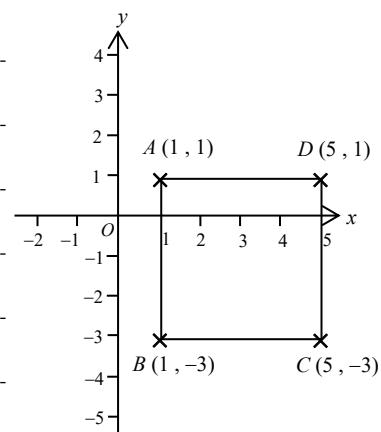
44.

45.



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46.

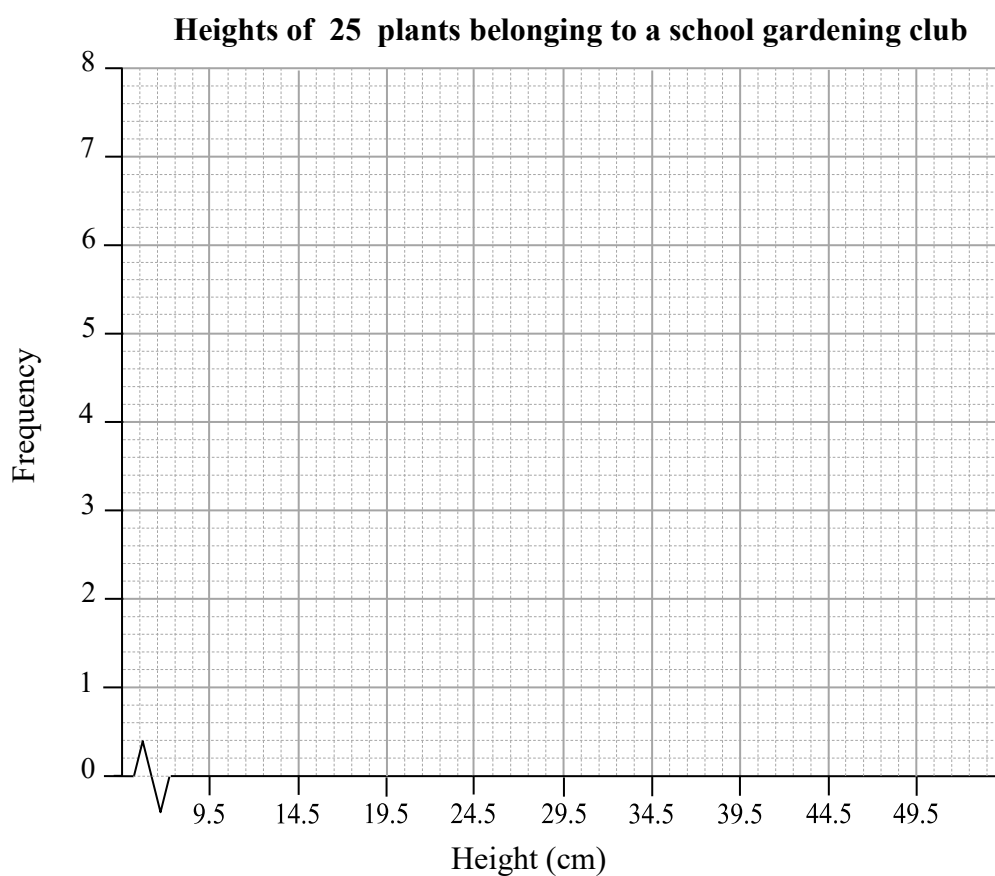


47.

(a)

Height (cm)	Class boundaries (cm)	Class mark (cm)	Frequency
10 – 19	9.5 – 19.5		5
20 – 29	19.5 – 29.5	24.5	7
30 – 39		34.5	6
40 – 49	39.5 – 49.5	44.5	7

(b)



END OF PAPER