

WK F2 Term 1 Revision Exercise A 2024 - 2025 paper 1

Term 1 Assessment Revision Exercise 2024 – 2025

Set A

Grade: 8 Name: _____

Subject: Mathematics Class: _____ ()

Paper: I Date: _____

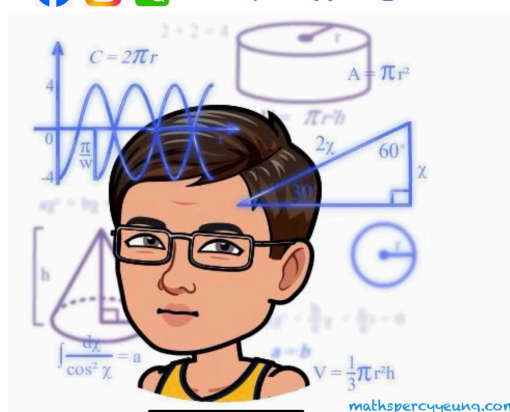
Time Allowed: 1 hour 15 minutes Total Marks: _____ / 64

This paper must be answered in English

INSTRUCTIONS

- This paper consists of Section A and Section B. Section A carries 38 marks. Section B carries 26 marks.
- Answer all the questions.
- Use of an HKEAA approved calculator is allowed.
- The diagrams in this paper are not necessarily drawn to scale.
- Write your mathematical expressions, answers and statements/conclusions in the spaces provided. There is NO need to show the rough work.
- Unless otherwise specified, numerical answers should be either exact or correct to 3 significant figures.
- Do your rough work in the rough worksheet provided.

Teacher's Use Only		
Question No.	Max. marks	Marks
Section A		
1	6	
2	4	
3	3	
4	2	
5	4	
6	3	
7	3	
8	6	
9	7	
Sub-total	38	
Section B		
10	7	
11	9	
12	10	
Sub-total	26	



Section A (44 marks)

1. (a) Factorize the following expressions.

(i) $mn + 5n$. (1 mark)

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(ii) $mn + 5n - 3m - 15$. (2 marks)

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(iii) $m^2 + 10m + 25$. (1 mark)

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(b) Hence, factorize $(m + 5)^2 + mn + 5n - 3m - 15$. (2 marks)

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2. (a) Expand
- $(4s + 7t)(7t - 4s)$
- . (1 mark)

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(b) Hence, expand $28\left(s + \frac{7}{4}t\right)\left(t - \frac{4}{7}s\right)$. (3 marks)

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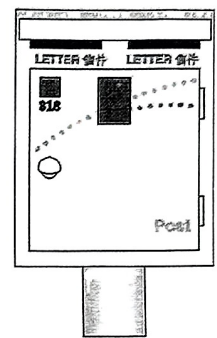
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3. If $a^2 - b^2 \equiv (a - b)^2 + h$, express h in terms of a and b . (3 marks)

4. The figure shows a posting box with scale 1 : 26. If the height of the posting box in the figure is 6 cm, find its actual height in cm. (2 marks)



5. 2 400 L of water is filled into a pool in 5 minutes. Find the filling rate in (a) L/min, (2 marks)

- (b) L/s. (2 marks)

6. In a company, there are 1 280 employees. 600 of them are males.

(a) Find the number of females in the company.

(1 mark)

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(b) Find the ratio of the number of males to the number of females in the company.

(2 marks)

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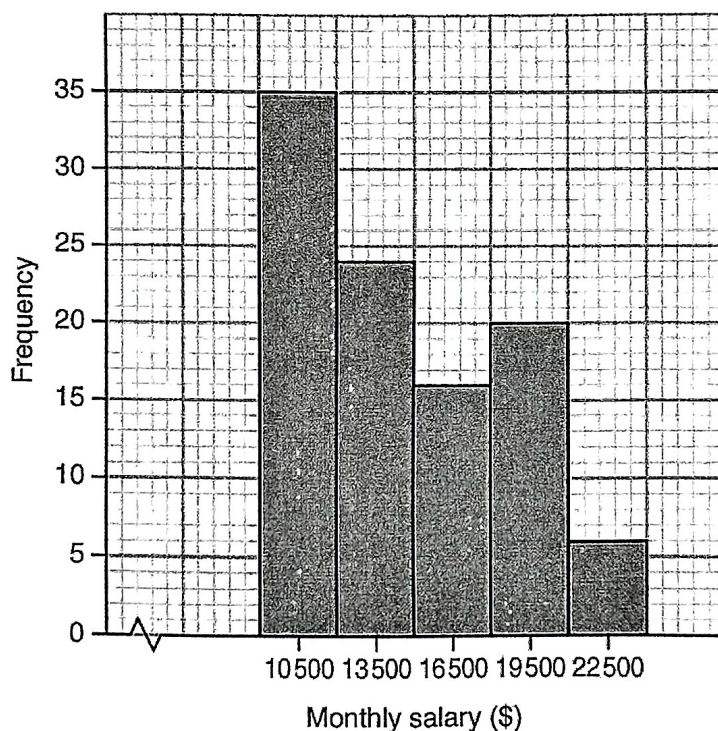
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7. The histogram below shows the distribution of the monthly salaries (in \$) of all staff in a company.

Monthly salaries of all staff in a company



(a) How many staff are there in the company?

(1 mark)

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(b) **Draw** the corresponding frequency polygon on the above histogram.

(2 marks)

Section B (26 marks)

10. In a fruit stall, there are three kinds of fruits: apples, pears and oranges. The number of apples is 25% more than that of pears.

(a) Let the number of pears be n . Find the ratio of the number of apples to that of pears.

(3 marks)

(b) It is known that the ratio of the number of pears to that of oranges is 2 : 1.

(i) Find the ratio of the number of apples to that of pears to that of oranges. (2 marks)

(ii) If there are 506 apples, pears and oranges altogether, find the number of apples.

(2 marks)

11. The following tables show the recorded time (in s) for 100 athletes to finish a lap of running track.

(a) Complete the following tables.

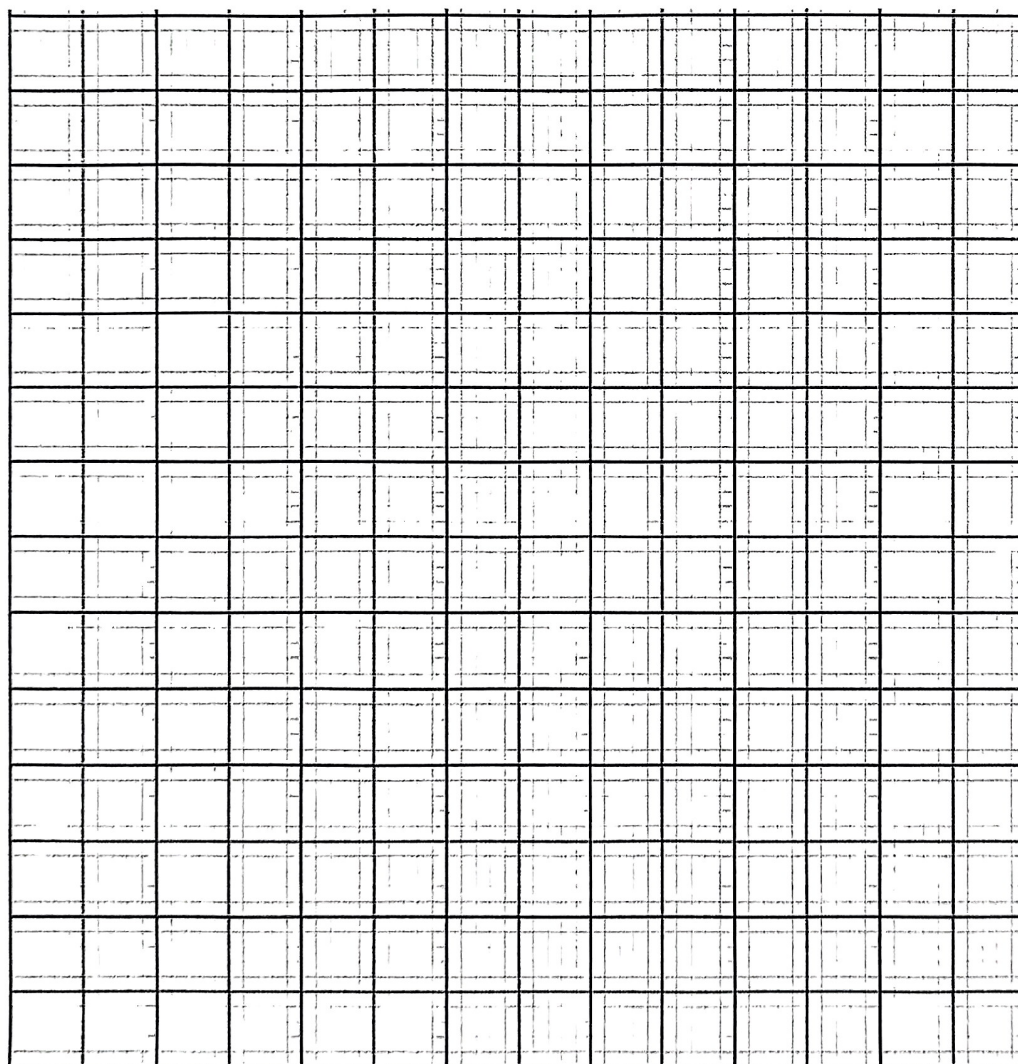
(2 marks)

Recorded time (s)	70 – 74	75 – 79	80 – 84	85 – 89	90 – 94	95 – 99
Number of athletes	8	20		32	10	

Recorded time less than (s)	69.5	74.5	79.5	84.5	89.5	94.5	99.5
Number of athletes						94	

(b) Draw a cumulative frequency polygon to present the data.

(4 marks)

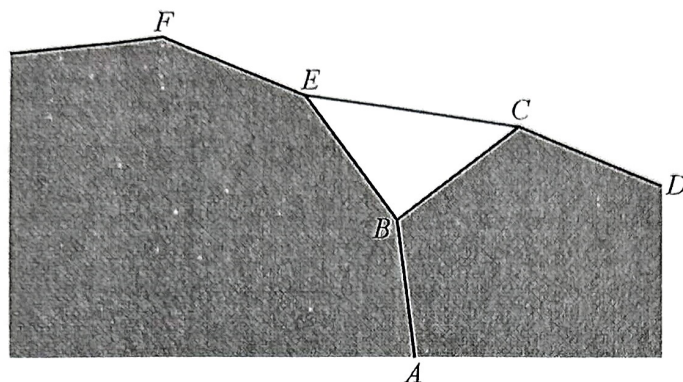


This image shows a full page of handwriting practice paper. It contains ten identical sets of three horizontal dashed lines, each set designed for practicing letter formation. The lines are evenly spaced across the entire page, providing ample room for writing practice.

(ii) Hence, find the median of the time of the qualified athletes from the cumulative frequency polygon. (2 marks)

[illegible]

12. In the figure, $ABCD$ is a part of a regular n -sided polygon. In the polygon, the size of each interior angle is twice the size of each exterior angle.



- (a) Find the value of n . (3 marks)

This image shows a blank sheet of white paper with ten horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and extend across the width of the page. There is no handwriting or other markings on the paper.

- (b) In the same figure, $ABEF$ is a part of a regular m -sided polygon. It is given that $\angle BCE = 45^\circ$.
- (i) Find the size of each interior angle of the regular m -sided polygon. (5 marks)

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(ii) Hence, find the value of m . (2 marks)

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