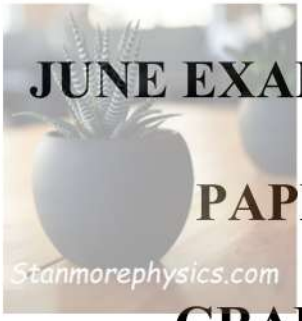
education

Department of Education
FREE STATE PROVINCE



JUNE EXAMINATION

PAPER 1

GRADE 11

MATHEMATICAL LITERACY



JUNE 2025

MARKS: 75

TIME: $1\frac{1}{2}$ HOURS

This question paper consists of 9 pages

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INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.

2. Number the answers correctly according to the numbering system used in this question paper.

3. Start EACH question on a NEW page.

4. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.

5. Show ALL calculations clearly.

6. Round off ALL final answers appropriately according to the given context, unless stated otherwise.

7. Indicate units of measurement, where applicable.

8. Diagrams are NOT necessarily drawn to scale, unless stated otherwise.

9. Write neatly and legibly.

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QUESTION 1

1.1 Below is a tax invoice for a cellphone contract.

TAX INVOICE

Invoice Number: 1534120458
Invoice Date: 01/04/2025

Mr Kane M.
3581 Botha Street
Vrede
9835

PACKAGE DETAIL

DESCRIPTION	FROM	TO	AMOUNT	TOTAL EXCL. VAT
Monthly Charges				R 134,78
Pinnacle 500MB	01/04/2025	30/04/2025	R 134,78	
Call Charges				R 11,22
Other Mobile Calls			R 4,75	
SmartData Internet			R 6,47	

INVOICE TOTALS

Amount (excluding VAT)	**A**
VAT @ 15%	**R 21,90**
Total (Including VAT)	**B**

[Source: adapted from www.cellc.com]

Use the information above to answer the questions that follow.

1.1.1 Identify the name of Mr Kane's cell phone network provider. (2)

1.1.2 State the date on which the invoice was issued. (2)

1.1.3 Calculate the value of the following:

(a) **A** (2)

(b) **B** (2)

1.1.4 Write down the ratio of Other Mobile Calls to SmartData Internet in the form:

1 : … (3)

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1.2 From 14 June to 14 July 2024, the Lejweleputswa Municipality hosted the Matjhabeng Championships that usually takes place every four years.

Below is the list of the top four teams after three games were played.

TABLE 1: TOP FOUR TEAMS RANKING AFTER THREE GAMES PLAYED

MATJHABENG CHAMPIONSHIP 2024				
TEAM AND POSITION		**GAMES PLAYED**	**GOAL DIFFERENCE**	**POINTS**
1	Tokologo	3	5	9
2	Masilo	3	0	4
3	Nala	3	– 3	2
4	Matjhabeng	3	– 2	1

[Source: adapted from matjhabengnews.net]

Note: The team with most points wins the Championship.

Use the information and TABLE 1 above to answer the questions that follow.

1.2.1 Identify the team with the highest goal difference. (2)

1.2.2 Write down the year in which the Matjhabeng Championships will be held again. (2)

[15]

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QUESTION 2

2.1 Mr. Chakane received a quotation for a geyser at Mohammed hardware which provides materials and services for geysers installation.

Below is the quotation received from the hardware store.

Mohammed Hardware
27 Marie Street
Villiers
Telephone: 058 825 0201
Email: mohammed10@gmail.com

QUOTATION

QUOTE No.	DATE
2034	30/04/2025
CUSTOMER ID	**VALID UNTIL**
8506215369082	31/05/2025

CUSTOMER INFO
Mr Chakane M.D.
301 EXT 7
Villiers
Email: morechakane10@gmail.com

ITEM	QUANTITY	UNIT Price (R) VAT INCL.	AMOUNT (R) VAT INCL.
Service fee	1	200,00	200,00
Labour for 5 hours at R75 per hour (R/h)	5	75,00	375,00
Parts	7	12,35	86,45
New client discount			–50,00
Thank you for your business!!	**SUBTOTAL**		611,45
	TOTAL		611,45

This quotation is not a contract.

[Source: adapted from www.sjsu.edu.com]

Use the information above to answer the questions that follow.

2.1.1 Write down the starting date of the quotation. (2)

2.1.2 Calculate the total amount payable for labour if the person(s) installing the geyser extends the labour by 3 hours. (3)

2.1.3 Show, with a calculation, how the amount of R86,45 was determined. (2)

2.1.4 Determine the probability (as a percentage) that Mr Chakane will pay R210 for the service fee. (2)

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2.2 Mr. Sethole is a resident at Mangaung Metropolitan (Metro) Municipality. The municipality uses the tariff table below to calculate the cost for water usage by customers.

TABLE 2: MANGAUNG METRO MUNICIPALITY WATER TARIFFS

Block	Tariff Structure	Tariff R/kℓ 2022/23	Tariff R/kℓ 2023/24
1	0 – 6 kℓ	10,86	11,40
2	7 – 15 kℓ	26,30	28,14
3	16 – 30 kℓ	29,84	32,23
4	31 – 60 kℓ	36,41	39,69
5	61 or more kℓ	43,58	48,37

[Source: adapted from www.mangaung.co.za]

Note:

- Tariffs above are excluding VAT at 15%.
- Charges are calculated monthly.

Use the information above and TABLE 2 to answer the questions that follow.

2.2.1 Determine the maximum kℓ that can be charged in Block 2. (2)

2.2.2 Mr. Sethole claimed that he will pay R814,68 for using 27 kℓ of water using the 2023/24 tariffs.

Verify, with calculations, whether his claim is valid. (7)

2.2.3 Calculate the percentage increase for Block 4 tariff from 2022/23 to 2023/24. (4)

[22]

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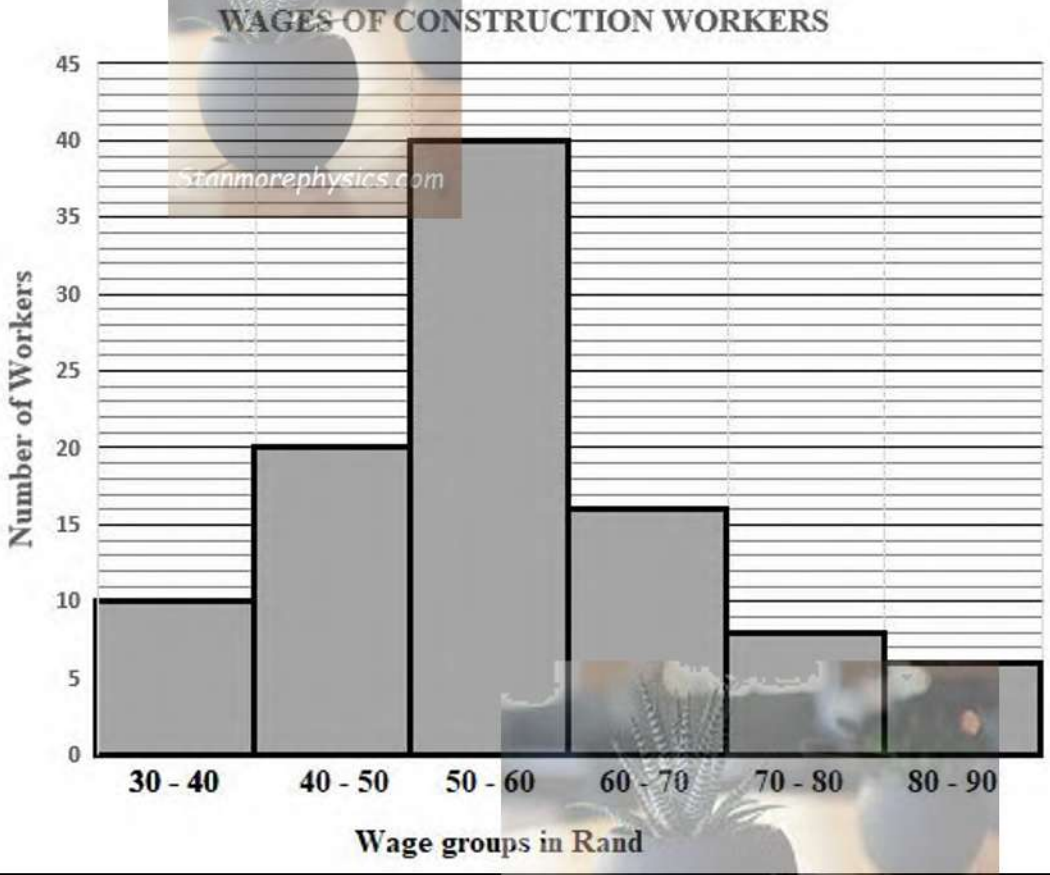
QUESTION 3

3.1 Below, a frequency table are shown that indicates the frequency of workers per wage group of hourly wages at a construction company. The frequency table was used to draw the graph.

TABLE 3: NUMBER OF WORKERS PER HOURLY WAGE GROUP

HOURLY WAGE GROUP (IN RANDS)	FREQUENCY
30 – 40	10
40 – 50	20
50 – 60	…
60 – 70	16
Y – X	8
80 – 90	6

GRAPH: REPRESENTATION OF FREQUENCY TABLE RESULTS



Use the graph above to answer the questions that follow.

3.1.1 Identify the type of graph. (2)

3.1.2 Calculate the total number of construction workers at this company. (3)

3.1.3 Identify the values of **Y** and **X** in the frequency table. (2)

3.1.4 Which class interval has the maximum frequency? (2)

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3.2 The data below shows the shoe sizes of selected learners.

6	9	8	7	6	**M**	6	8	7	9
10	6	6	**M**						

Use the information above to answer the questions that follow.

3.2.1 If the mean of the shoe sizes is 7, calculate the value of M. (5)

3.2.2 Identify the minimum value of the data. (2)

[16]



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QUESTION 4

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4.1 Stephen's family drew up the following monthly budget.

INCOME		EXPENDITURE	
Mother's salary	R7 150	Bond instalment	R2 700
Father's salary	**A**	Car instalment	R1 950
Interest on investment	R534	Water and electricity	**C**
		Cell phones	R 400
		Food/entertainment	R3 000
		Clothing account	R1 200
		Petrol	R1 500
		Car and home Insurance	R 392
		School fees	**B**
		Savings	…
Total income	**R12 184**	**Total expenditure**	**R12 184**

[Source: adapted from www.idc.com]

NOTE:

- There are three schoolchildren including Stephen in this family.
- For EACH child school fee is R40 per month.
- The average cost for water and electricity per month for the family is R180.
- The family decided to save 10% of their father's salary per month.

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Use the information above to answer the questions that follow.

4.1.1 Calculate:

(a) Stephen's father's monthly salary (**A**). (2)

(b) the total monthly school fees **(B).** (2)

(c) the value of **C** if it is 15% more than the average cost the family usually pay. (3)

4.1.2 Calculate the insurance amount as a percentage of the total income. (3)

4.2 Stephen recorded the number of goals scored per match by a soccer team he supports in the following table.

1	7	9	4	3	5	8	3	2	8

Use the information above to answer the questions that follow.

4.2.1 Give the total number of matches that the soccer team played. (2)

4.2.2 Identify the mode. (2)

4.2.3 Calculate the range. (2)

4.2.4 Determine the median. (3)

4.2.5 Determine the probability (as a decimal fraction) of getting a match with less than 5 goals out of all the matches played. (3)

[22]

TOTAL = [75 marks]