KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

PROVINCIAL STANDARDISED ASSESSMENT

GRADE 11

MATHEMATICAL LITERACY P1

JUNE 2026

Learnmorephysics.com

MARKS: 75

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

This question paper consists of 7 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 the calculations clearly.
6. Round off ALL the 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 Glass-door services employees TWO staff members. Table 1 below shows the monthly salaries of the two employees.

TABLE 1: EMPLOYEES' MONTHLY SALARY

Employee	Gross monthly salary
Mvuzo	R8 000
Ntombi	R20 000

Note: UIF monthly contribution is R17 712 as maximum, the employee contributes 1%, and the employer contributes 1% to the fund.

[Adabpted_from_ufiling.labour.gov.za/uif/]

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

1.1.1 Show by calculations how the UIF contribution of R177,12 was calculated. (2)

1.1.2 Mvuzo contributes R80 per month towards the Unemployment Insurance Fund. Calculate the annual total combined UIF contribution by both the employer and the employee. (2)

1.1.3 Give ONE benefit for contributing towards Unemployment Insurance Fund. (2)

1.2 Mt Lodge has 80 employees. The lodge management intends to improve the canteen menu and asked 20 employees, randomly selected as they report for duty in the morning.

Use the information above and answer the questions that follow.

1.2.1 Define the term *Population* in the given context (2)

1.2.2 Write down the simplified ratio of a sample to a population group of employees. (2)

1.2.3 Mt Lodge has 48 female employees, determine the probability, as a decimal, of randomly finding a female employee in the lodge. (2)

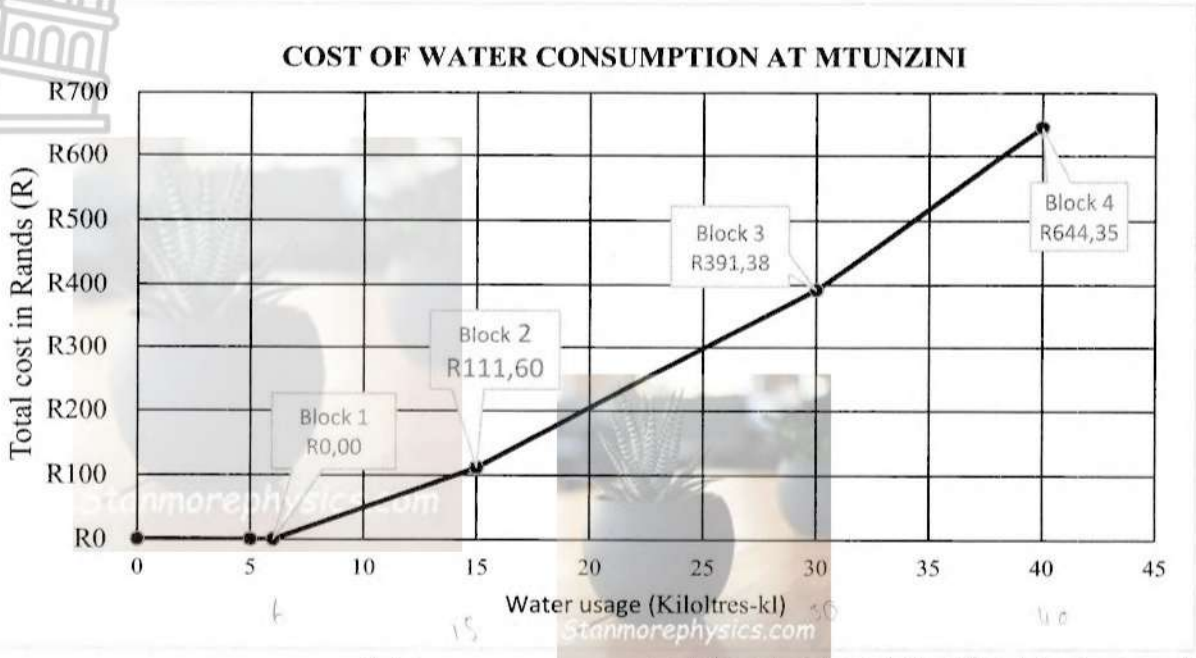
1.2.4 If the number of employees increases by 10%. Calculate the number of new employees after the 10% increase. (2)

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QUESTION 2

2.1 The graph below represents the cost (excluding 15% VAT) of water consumption in Mtunzini for the 2025/2026 financial year. The municipality subsidises the residential consumers with 6 kilolitres of water for free.



[Adapted from https://umlalazi.gov.za/]

Use the information and the graph above to answer the questions that follow.

2.1.1 Explain why the municipality provides the first 6kl of water for free to its residential customers. (2)

2.1.2 The household was billed R644,35 for using 40kl. Calculate the VAT amount to be charged on this bill. (2)

2.1.3 Write down (excluding VAT), the estimated total cost of using 25kl. (2)

2.1.4 Show by calculation that the tariff charge for the second block is R14,26 including VAT. (4)

2.1.5 The municipality manager at Mtunzini stated that, if a household uses the daily average water of 0,645 kl, they will pay more than R391,38 excluding VAT in the month of July. Verify his statement by showing all calculations. (3)

2.2 TABLE 2 below shows the sliding scale method for charging water costs in Mtunzini during water restrictions. Some values have been omitted.

TABLE 2: MTUNZINI WATER TARIFF STRUCTURE EXCLUDING 15% VAT

Block	Usage (in kl)	Tariff per kl
1	0 – 6	R12,40
2	6,1 – 15	R18,65
3	15,1 – 30	R25,30
4	Above 30	R33,50

[Adapted from https://umlalazi.gov.za/]

Use TABLE 2 above to answer the questions that follow.

2.2.1 Determine the maximum number of kilolitres of water charged in block 3 (2)

2.2.2 Write down the formula to be used to calculate the total consumption cost excluding VAT, if a household has consumed between 15,1kl – 30kl, in the form:

Total consumption cost = R242,25 + ... (2)

2.2.3 Shemi's household used 22kl of water in one month during water restrictions. Calculate, including VAT, the total cost for the water bill. (5)

2.2.4 The municipality charges a monthly flat rate of 70% of the total water used by a household for sanitation.

a) Use information in **2.2.3** to calculate the sanitation cost, including VAT, for Shemi's household. (2)

b) Determine Shemi's combined total monthly bill for water and sanitation, including VAT. (2)

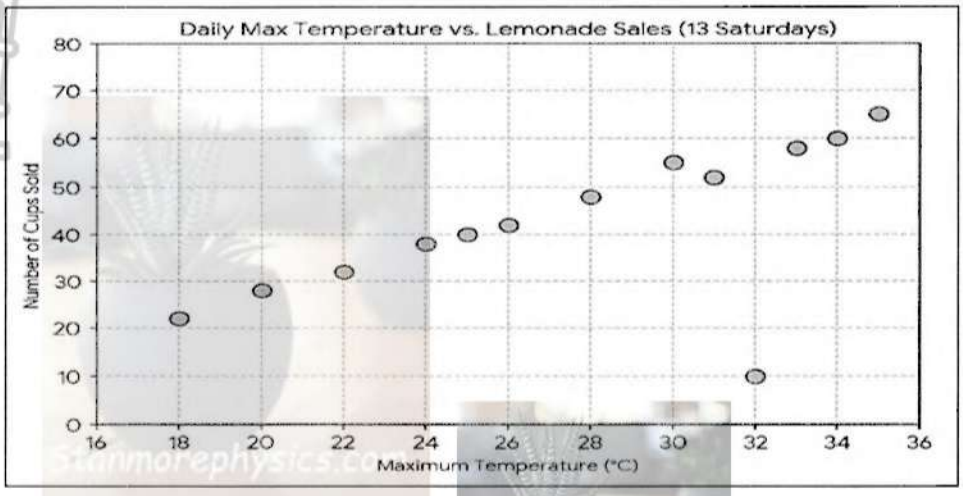
c) Suggest TWO possible ways in which Shemi's household can reduce the water bill. (4)

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QUESTION 3

3.1 The scatter plot below shows the relationship between the maximum temperature (°C) and the lemonade cups sold by Lindiwe on Saturdays.



[Adapted from: https://mrsmolina.com/]

Use the graph above to answer the questions that follow.

3.1.1 Identify the temperature and the number of cups of an outlier in the given graph. (2)

3.1.2 Describe the type and overall correlation of the data above, excluding the outlier value. (3)

3.1.3 Calculate the difference between the number of cups of lemonade at 25 °C and 34°C. (3)

3.1.4 Provide a possible reason why Lindiwe could only sell less than 10 cups on a very hot Saturday. (2)

3.2 Table 3 below compares Lindiwe's lemonade sales and her sister's ice tea sales over four weekends.

TABLE 3: LEMONADE SALES AND ICE-TEA SALES

WEEKS	Week 1	Week 2	Week 3	Week 4
Lemonade sales	45	56	63	50
Ice tea	30	40	60	54

Use TABLE 3 above and answer the questions that follow.

3.2.1 Calculate the total number of cups of lemonade and ice tea sold during week 2. (2)

3.2.2 Lindiwe's sister sold peach-flavoured to mint-flavoured cups of iced tea in a ratio of 3:2. Calculate the number of cups of peach-flavoured iced tea in week 1 (2)

3.2.3 Name ONE type of graph that will be best to represent the data above. (2)

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QUESTION 4

4.1 Lerato runs a small business Ken-L-Tech Solutions in Richards Bay. She recently imported a high-end laptop from suppliers in Germany.

Below is the official tax invoice received, followed by her bank fees structure.

TABLE 4: LERATO'S TAX INVOICE

Ken-L-Tech Solutions		
Supplier: Deutch- Tech-Gmbh	Invoice number	GER – 990 15 March 2026
Description		***Price in euro -€***
1 X Pro-book 500 laptop		€1 150
Shipping & insurance		€75
Total due		**A**
BANK FEE'S STRUCTURE		
Bank Service		***Rate/fee***
Exchange rate		€1 = R20,48
International SWIFT fee		R212,75 VAT incl.
Commission		0,60% of the total Rand value

[Adapted from https://www.globalvatcompliance.com/]

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Use TABLE 4 above to answer the questions that follow.

4.1.1 Calculate the value of **A**, the total amount due in euros. (2)

4.1.2 Convert the total amount due to South African Rand. (2)

4.1.3 Lerato states that the total bank fees with commission will be less than R363,28 for the purchase. Verify, showing ALL calculations if the statement is correct. (4)

4.2 Lerato tracks her business electricity monthly costs for the first seven months.

Lerato's monthly electricity costs
R1 450; R1 800; R1 250; R2 100; R1 800; R1 250; R1 890.

Use the information above and answer the following questions.

4.2.1 State whether the electricity monthly cost is discrete or continuous. Explain your answer (2)

4.2.2 Calculate the mean monthly electricity cost in rand. (3)

4.2.3 Determine the median of the monthly electricity cost. (2)

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TOTAL MARKS:[75]

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