



**education**

Department of  
Education  
FREE STATE PROVINCE

**GRADE 10**

**MATHEMATICAL LITERACY**

**JUNE 2022**

**PAPER 1**

**MARKS: 50**

**TIME: 1 HOUR**

**This question paper consist of 6 pages**

## INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Number the questions correctly according to the numbering system used in this question paper.
3. An approved calculator (non-programmable and non-graphical) may be used unless stated otherwise.
4. Show ALL calculations clearly.
5. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
6. Indicate units of measurement, where applicable.
7. Start EACH question on a NEW page.
8. Write neatly and legibly.



**QUESTION 1**

Neo is a third-year college student who receives a monthly allowance of R3 800,00 from her parents. She also works at a supermarket on weekends and receives a monthly wage of R1 800. TABLE 1 below show Neo’s monthly budget.

**TABLE 1: NEO’S MONTHLY BUDGET**

INCOME		EXPENDITURE	
Allowance	R3 800	Rent	R1 500
Wage	R1 800	Food	R1 700
		Clothes	R300
		Entertainment	R250
		Others	R700
<b>Total</b>	<b>A</b>		<b>R4 450</b>

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

- 1.1 Write down the amount that Neo spends on entertainment. (2)
- 1.2 Identify an expenditure item that can be classified as a *fixed expense*. (2)
- 1.3 Calculate the value of **A**, her total monthly income. (2)
- 1.4 Arrange the expenditure amounts in ascending order. (2)
- 1.5 Determine the median of the expenditure amounts. (2)

**[10]**

**QUESTION 2**

Below is a till slip that Priscilla received after shopping for clothes.

28/11/2021 15:22:06 Transaction Number:108 005 Tax invoice no:1122346	Store No: 362 Cashier Name: Palesa
<b>Item</b>	<b>Amount</b>
Plain Skirt	550,00
Plain Top	499,00
Plain Top discount @ 33%	<b>B</b>
<b>SUBTOTAL (EXCLUDING) VAT</b>	768,98
VAT (15%)	...
<b>TOTAL AMOUNT PAID</b>	884,33

[Source: adapted from an actual till slip]

Use the TILL SLIP above to answer the questions that follow

- 2.1 Write down the name of the cashier. (2)
- 2.2 Determine the number of items bought at this store. (2)
- 2.3 Calculate the value of **B**, the discount on the ordinary top. (3)
- 2.4 Determine the probability (as a decimal) of buying an item that cost more than R500,00. (2)
- 2.5 Show, with calculations how the total amount of R884,33 was calculated. (4)
- 2.6 Priscilla stated that the unit ratio of the plain top to the total amount paid is **1 : 1,6**. Verify, showing all calculations if her statement is correct. (3)

**[16]**

**QUESTION 3**

A survey was done on all the learners at Bluegumbosch Secondary School to determine the number of boys and girls who enjoy reading. The results are provided in table 2 below.

**TABLE 2: NUMBER OF BOYS AND GIRLS WHO ENJOY READING.**

	<b>ENJOY READING</b>	<b>DO NOT ENJOY READING</b>	<b>TOTAL</b>
<b>BOYS</b>	<b>C</b>	212	327
<b>GIRLS</b>	375	101	476
<b>TOTAL</b>	490	313	803

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

- 3.1 Is the data above regarded as a sample or a population? (2)
- 3.2 Determine the missing value of **C** in the table. (2)
- 3.3 Identify the gender that enjoys reading the LEAST. (2)
- 3.4 What advice would you give to the principal of the school to encourage more reading amongst the group mentioned in 3.3 above? (2)
- 3.5 Give an example of a business that will find the above data useful. (2)

**[10]**

**QUESTION 4**

Jabu opened a current account at BRON bank Silverton branch. TABLE 3 below indicates transactions made by Jabu using his current account card.

**TABLE 3: JABU'S BANK STATEMENT FOR THE MONTH OF JUNE**

DATE	TRANSACTION	DEBIT (IN RANDS)	CREDIT (IN RANDS)	BALANCE
	<b>Opening Balance</b>			154,69
01 June	Cash deposit		5 000,00	5 154,69
02 June	ATM Cash	100,00		5 054,69
02 June	ATM fee	5,25		5 049,44
04 June	Card Payment Lagoon supermarket	<b>D</b>		4 929,44
12 June	Card POS Purchase BHE uncapped data	1004,00		3 925,44
17 June	Debit card POS Purchase Hardware store	2840,00		1 085,44
29 June	#Monthly account fee	125		960,44
	<b>TOTAL</b>	<b>4 194, 25</b>		
	<b>Closing balance</b>			955,19

Source: www.thebalance.com

Use information in TABLE 3 to answer the questions that follow:

- 4.1 Explain the meaning of the term *credit* in this context of the question. (2)
- 4.2 Calculate the value of **D**. (2)
- 4.3 Show with calculations that the monthly account fee is 2,98% of the total debits. (3)
- 4.4 Provide a possible reason why banks charge monthly account fee. (2)
- 4.5 Determine the range for the debit transactions. (2)
- 4.6 Jabu claimed that the mean for the debit column is less than a thousand rands. Verify, showing all calculations if his claim is valid. (3)

**TOTAL [14]**  
**[50]**