



Education and Sport Development

Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha la Thuto le Tihabololo ya Metshameko
NORTH WEST PROVINCE

**NATIONAL
SENIOR CERTIFICATE**

GRADE 10

MATHEMATICAL LITERACY P1

JUNE 2018

MARKS: 50

TIME: 1 hour

This question paper consists of 7 pages including annexures.



NW/JUNE/MATLIT/EMIS/6*****

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions. Answer ALL the questions.
2. Use ANNEXURE A to answer QUESTION 5.
3. Number the answers correctly according to the numbering system used in the question paper.
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 final answers appropriately according to the given context, unless stated otherwise.
7. Units of measurement MUST be indicated, where applicable.
8. Diagrams are NOT necessarily drawn to scale, unless stated otherwise.
9. Write neatly and legibly.

QUESTION 1

- 1.1 Mr Ditsebe organised a 50th birthday party for his wife. He budgeted R42 570 for his expenses and spent 30% of the total budget on catering. Calculate the cost of catering (in rand). (2)
- 1.2 Maggy was writing June Mathematical Literacy question paper for grade 10. The question paper was 1 hour long and out of 50 marks. How long did she spend (in minutes) on a question worth 3 marks? (3)
- 1.3 One bundle of washing uses 250g of washing powder. How many bundles can be washed with 3kg of washing powder? (3)
- [8]**

QUESTION 2

Rancia has a savings account at ATP Bank. Below is a bank statement that Rancia received for the month of September 2017. Some of the amounts have been omitted.

Ms R Rancia P.o Box 4620 Saulspoort 2735		Statement period: Sept 2017 Account No : 14326 7799		
Transaction date	Description	Amount (R)	Balance (R)	Bank Charges (R)
Opening Balance		R1 107,61		
03/09	Credit - Salary	4 307, 50	5 415,11	
05/09	Purchase - Steers	89,90	5 325,21	
05/09	Airtime Topup 0761116060	55,00	5 270,21	1,10
12/09	Transfer from Mr MJ Kraai	250,00	5 520,21	
15/09	Credit - Salary	14 200,00	19 720,21	
15/09	Debit Order - Car Fin 8612	2 450,00	17 270,21	
17/09	Debit Order – M Choice 187	430,00	16 840,21	
21/09	ATM Cash Withdrawal	3 000,00	13 840,21	55,00
30/09	ATM Cash Deposit	13 000,00		56,00
				A
Closing balance			B	

NOTE: Bank charges are deducted at the end of the month.

Use above bank statement to answer the questions that follow.

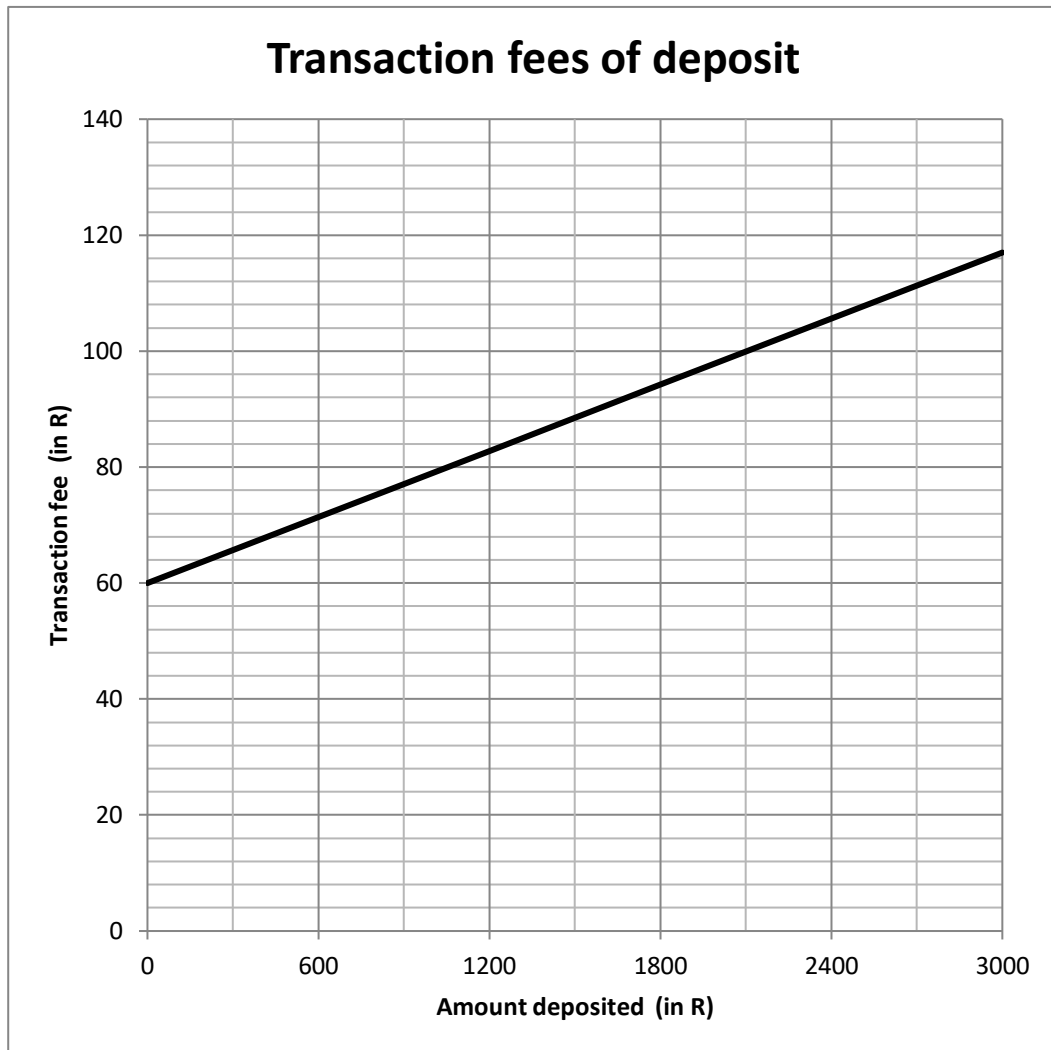
- 2.1 Determine the opening balance of this account. (2)
- 2.2 Name the person who transferred the amount of money into this account. (2)
- 2.3 Calculate the missing value of **A**, the total amount of the bank charges. (2)
- 2.4 Calculate the missing value of **B**, the closing balance. (4)

- 2.5 Rancia invested R5 500 from her savings. She earned R6 314,62 after 2 years. Calculate the amount of interest earned. (2)

2.6

During October month, Rancia made cash deposits at the ATP bank. The graph below shows transaction fees of her deposit.

TRANSACTION FEES OF DEPOSIT.



Use the graph above to answer the questions that follow.

- 2.6.1 Identify an independent variable. (2)
- 2.6.2 Write down the transaction fee for the deposit of R600. (2)

[16]

QUESTION 3

TABLE 1 below shows the bus fare (in rand) for a single trip.

**TABLE 1: BUS FARE FOR A SINGLE TRIP**

Days Running	Friday, Wednesday and Sunday		
Train Station	Bus fare (in Rand)	Arrival Time	Departure Time
Johannesburg to			18:40
Germiston	100	19:03	19:18
Standerton	150	21:37	21:51
New Castle	190	00:17	00:27
Ladysmith	240	02:35	02:45
Escourt	270	03:46	03:51
Pietermaritzburg	320	06:15	06:32
Durban	360	09:10	

[Source : <http://www.zapmetaco.za>]

Use TABLE 1 above to answer the questions that follow.

3.1 Determine, in simplified form, the ratio of:

Bus fare for Standerton: Bus fare for Escourt (2)

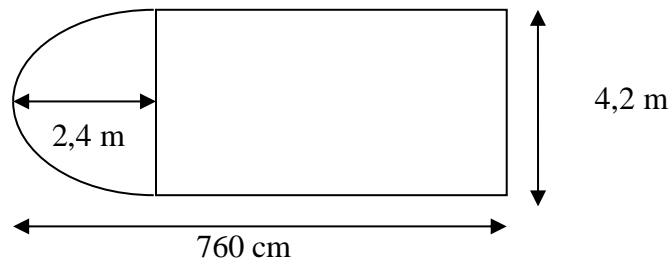
3.2 Determine the cost from Johannesburg to Ladysmith. (2)

3.3 Mary travels from Johannesburg to Durban and back once a month.
Calculate her total return travelling cost for ONE year. (4)

[8]

QUESTION 4

Mr Mogwai renovated his bedroom. The diagram below show his rectangular bedroom with a semi- circular bathroom with a radius of 2,4 m.



You may use the following formulae:

The area of a rectangular bedroom = $l \times b$

Area of a semi-circle = $\frac{1}{2} \pi r^2$ where $\pi = 3,142$

Use the information above to answer the questions that follow.

- 4.1 Calculate (in m) the length of the rectangular bedroom. (3)
- 4.2 Calculate the perimeter of the rectangular bedroom. (2)
- 4.3 Calculate (in m) the area of the rectangular bedroom. (2)
- 4.4 Calculate the area of the bathroom. (2)
- 4.5 Hence, calculate the total area of the bedroom and the bathroom (2)

[11]

QUESTION 5

Rancia went for shopping at Super store. ANNEXURE A shows the layout plan of the Super store.

Use ANNEXURE B to answer questions that follow

- 5.1 How many checkout points does the Super store have? (2)
- 5.2 Rancia went to buy toys for his son at the Super store. Determine the shortest direction to the toys section from the entrance. (2)
- 5.3 Rancia walked from toys section to health and beauty section. The distance between these two sections is 80 mm. Determine the actual distance (in m) that Rancia walked. (3)

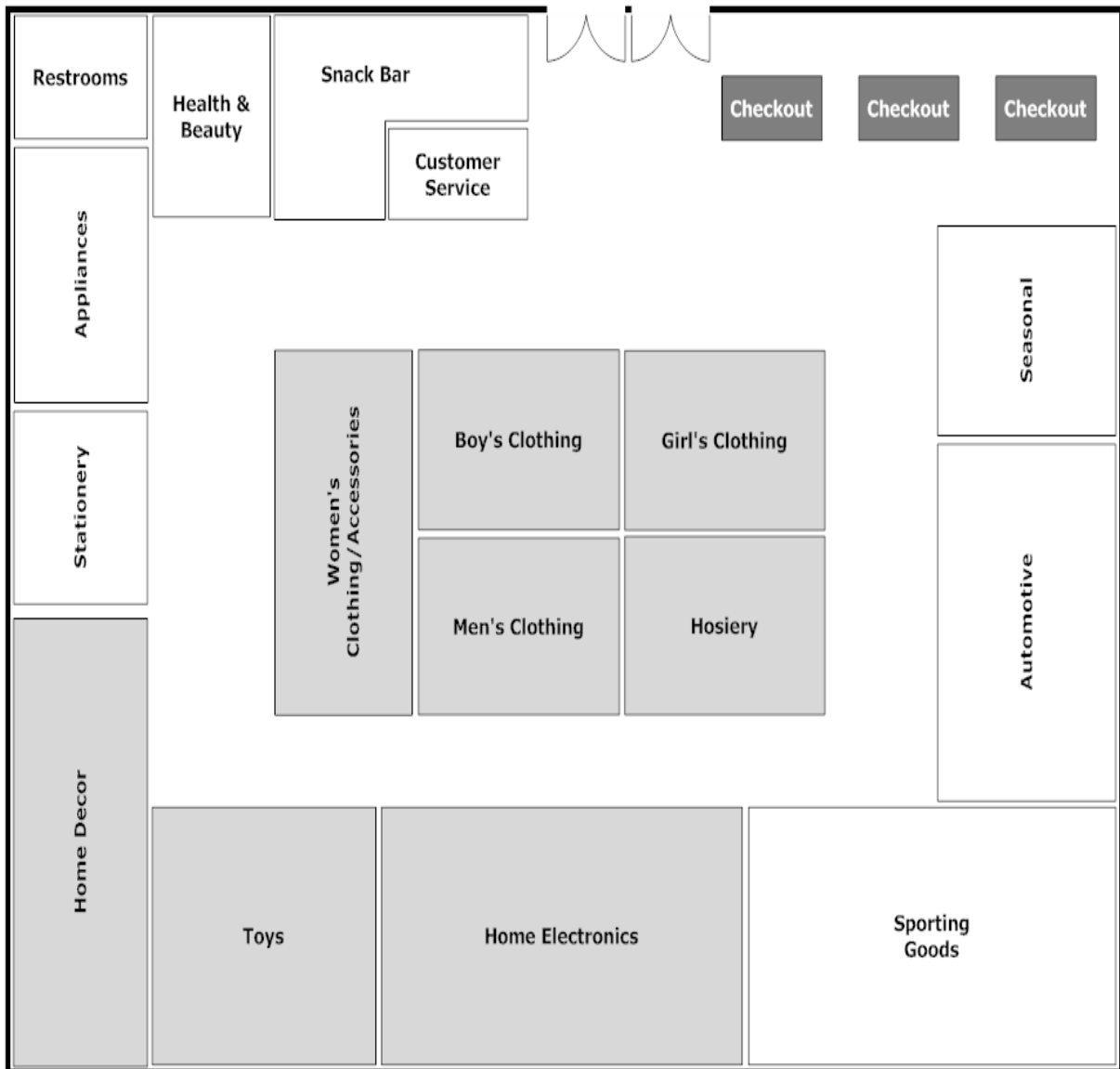
[7]

TOTAL: 50

ANNEXURE A

QUESTION 5

LAYOUT PLAN OF A SUPER STORE



SCALE 1:200

KEY : ITEM DESCRIPTION

 Entrance