



# 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**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 10**

**MATHEMATICAL LITERACY P2**

**JUNE 2018**

**MARKS:** 50

**TIME:** 1 hour

This question paper consists of 7 pages including Annexure.



**INSTRUCTIONS AND INFORMATION**

1. This question paper consist of FOUR questions. Answer ALL questions.
2. Use ANNEXURE A to answer QUESTION 3.
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. ALL the calculations must be clearly shown.
6. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
7. Units of measurement MUST be indicated, were applicable.
8. Diagrams are NOT necessarily drawn to scale, unless stated otherwise.
9. Write neatly and legibly.

**QUESTION 1**

1.1

Mr Diale is working for the North-West Health department in January. His monthly salary is R32 100,00. Mr Diale together with his wife have drafted their monthly budget for the month of June.

Below is a table showing Mr Diale's budget.

**TABLE 1: Mr DIALE'S BUDGET FOR THE MONTH OF JUNE**

Monthly Income		Monthly Expenditure	
Salary	R32 100,00	Bond Repayment	R8 000,00
Travel Allowance	R3 000,00	Bond and household Insurance	R1 650,00
		Municipal Rates	R645,00
		Water	R525,00
		Electricity	R500,00
		Grocery	R2 000,00
		Car Insurance	R570,00
		Savings	15% of total Income
		Entertainment	R2 000,00
		School Fees	R1 200,00
<b>Total Income</b>	<b>A = R35 100</b>		<b>B</b>

Use the table and the information above to answer the questions that follow

1.1.1 Show how the value of A, R35 100 was calculated.

(2)

1.1.2 Calculate the value of B.

(4)

1.1.3 Mr Diale gets 6,8% salary increase on the 1<sup>st</sup> of April every year. Calculate his salary before the increment.

(2)

1.1.4 Explain how will the current increase of VAT and petrol affect the Diale's budget (2)

1.2 Mr Diale leaves home at 6:30 and arrives at work at 7:10, how long does it take Mr Diale to arrive at his work place?

(2)

[12]

**QUESTION 2**

2.1

Mr Diale's wife is unemployed and he has to support his parents who are both pensioners. He decided to start a courier company which is based in Rustenburg where he lives. His company works with small businesses and people who want to send parcels from Rustenburg to different towns around North West.

Mr Diale charges a fixed amount of R100 plus R1,50 per kilometre travelled.

**DIALE'S COURIER SERVICES**

Use the information above to answer the questions that follow.

2.1.1 Write down the formula to calculate the delivery cost.

(2)

2.1.2 Calculate the total cost that the customer will pay if a parcel must be delivered from Rustenburg to Mafikeng which is 414 km to and from Rustenburg.

(2)

2.1.3 Mr Diale's car uses 95 Octane petrol which costs R14,55 per litre. It is estimated that the price of 95 Octane petrol will go up by 43c per litre. Calculate how much he will spend to fill up the tank of his car which has a capacity of 65 litres. (4)

2.2 The parcel to be delivered to Mahikeng has a length 130cm and the beath of 80cm, calculate the area of the parcel to be delivered.

You may the following formula :

Area = length  $\times$  breath

(2)

**[10]**

**QUESTION 3**

A young couple is going to get married. They have chosen a hall for their ceremony and decided on how the seating plan should look like for the reception. The seating plan is represented in ANNEXURE A.

Refer to the seating plan in ANNEXURE A

- 3.1 How many people do the couple intend to invite?  
(3)
- 3.2 Why are there no chairs arranged on the shorter sides of the tables?  
(2)
- 3.3 A person seated at Table 6 close to the MAIN TABLE wants to put her gift on the GIFT TABLE. Describe a possible route this person can take without walking over the DANCE FLOOR.  
(2)
- 3.4 The caretaker of the hall stated that the area of the dance floor is  $\frac{1}{3}$  of the floor area of the hall.  
The length of the floor is 15,5 m and the width is 9 m. Calculate the area of the dance floor.  
You may use the formula:  
**Area = length  $\times$  width**  
(4)
- 3.5 The groom's father offered to pay for the bride's wedding ring, which costs R1 349 including VAT. Calculate the VAT amount.  
(2)

[13]

**QUESTION 4**

The scale of a plan is 1:50

- 4.1 If the length of an item on the plan is 370 mm, determine the actual length of the item in metres.  
(3)
- 4.2 Mpho and Tebogo worked for an old woman in their community by painting her house and cleaning the yard. They were each paid a total amount of R1 280,00 for the work they did. Mpho worked for 28 hrs and Tebogo worked for 36 hrs.
- 4.2.1 Write the hours that they worked as a simplified ratio.  
(2)
- 4.2.2 Calculate how much each of them should be paid.  
(4)
- 4.3 Mpho took a trip to Cape Town. The journey will take 37 hrs to reach Cape Town.
- 4.3.1 How long will the trip take in days and hours?  
(2)
- 4.3.2 If Mpho is planning to leave for Cape Town at 10:00 on Wednesday 29<sup>th</sup> June. On what date and time will he arrive in Cape Town?  
(2)
- 4.3.3 Give ONE possible reason why it took Mpho 37 hours to reach Cape Town.  
(2)

**[15]**

**TOTAL: [50]**

**ANNEXURE A**

QUESTION 3.1

