Education and Sport Development

Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha la Thuto le Tlhabololo ya Metshameko

NORTH WEST PROVINCE

NATIONAL
SENIOR CERTIFICATE

GRADE 10

MATHEMATICAL LITERACY P2

JUNE 2019

MARKS: 50

TIME: 1 hour

This question paper consists of 9 pages including FOUR Annexures.

INSTRUCTIONS AND INFORMATION

1. This question paper consist of THREE questions. Answer ALL questions.

2. Use ANNEXURES to answer the following questions:

   ANNEXURE A for QUESTION 2.1

   ANNEXURE B for QUESTION 2.2

   ANNEXURE C for QUESTION 3.1

   ANNEXURE D for QUESTION 3.2

3. Number the answers correctly according to the numbering system used in this 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

Sediba Primary wants the Rustenburg Municipality to construct Speed Humps on the road which is situated in the main entrance of the school. The Municipality looked for a company that will install those Speed Humps. The contracted company indicated that one wheel barrow of tar equals
 2 cm^2.The dimensions of the Speed Humps are 3 700 mm long and 600 mm wide.

1.1   Calculate the size of the Speed Humps that are supposed to be constructed using dimensions given above. Let your answer be in cm. Use the Formula: (3)

    Area= Length $\times$ Width

1.2   The contactor used tar to build the Speed Humps. If one wheelbarrow of tar equals 40 cm^2, and the contractor must build four Speed Humps, how many wheel barrows will be needed to complete four Speed Humps?   (3)

1.3   The Contractor appointed for construction of the Speed Humps quoted that one Speed Hump cost R3 405,00 including labour. Calculate the total cost of four Speed Humps.   (2)

1.4   Why is it important to always paint the Speed Humps with Yellow or White paint?   (2)

1.5   Give two reasons why you think it is important to construct Speed Humps especially around schools or areas of crossing.   (4)

                                                                                          [14]

QUESTION 2

2.1

> Ms Moroke has a Gold Current Account at Together Bank. The fee structure of Together Bank is given in ANNEXURE A.

Use the fee structure in ANNEXURE A to answer the questions that follow:

2.1.1 Calculate the difference in price between 2017 and 2018 to deposit R500,00 at an Automatic Teller Machine (ATM). (4)

2.1.2 Ms Moroke stated that the percentage change for a withdrawal from Together Bank increased by fifty percent more than the withdrawal from another ATM. Show, using calculations, whether her statement is valid or not. (5)

2.2

> Ms Moroke received a basic bread recipe from a friend in Zambia. The basic bread is given in ANNEXURE B
>
> You may use the following conversions:
>
> **1 ounce = 28 grams**
> **1cup =250 m*l***

Use the bread recipe in ANNEXURE B and answer the questions that follow:

2.2.1 If Ms Moroke needs $6\frac{1}{4}$ cups of all-purpose flour, how many m*l* of all-purpose of flour? (2)

2.2.2 Ms Moroke used a rectangular loaf pan with the following dimensions:

Length = 22,86cm

Breath = 12,7cm

Calculate the Perimeter of the loaf pan using the formula: Perimeter = L+B+L+B (3)

2.2.3 Ms Moroke stated that it will take her less than $2\frac{1}{2}$ hours to make 2 loaves of bread if she only considers the minimum times indicated in the recipe.

Note: The time Ms Moroke refers to in her statement includes mixing, rising, panning and baking time.

Show, with necessary calculations, whether Ms Moroke's statement is valid or not. (5)

[20]

QUESTION 3

3.1

> Ms Moroke has an account with Affordable Clothing Store and receives an account statement every month. ANNEXURE C shows one Ms Moroke's

Use the account statement in ANNEXURE C to answer the questions that follow:

3.1.1   Show with the necessary calculations how the purchase for the month has been calculated.   (2)

3.1.2   Determine the missing value, A (monthly interest on the money outstanding).   (4)

3.1.3   Affordable Clothing Store calculates the amount owing using a percentage. Calculate the percentage they have used to determine the amount that Ms Moroke has to pay on the balance that she owes.   (3)

3.2

> ANNEXURE D is the seating plan of Mombela Stadium. Ms Moroke, her husband and her son bought 3 tickets to go and watch the soccer match on a Saturday afternoon.

 Use ANNEXURE D and answer the questions that follow:

3.2.1   The Moroke's Family tickets indicated that they are allocated C13, C14 and C15.

They used Gate 4 to enter the stadium. Give the shortest distance that the Moroke's family can follow to reach their seats.   (4)

3.2.2   Gate 4 that was used by the Moroke family, was it convenient for them to reach their

seats in the stadium, state Yes or No and support your statement.   (3)

[16]

TOTAL = 50

ANNEXURE A

QUESTION 2.1

TOGETHER BANK 2018 FEES

TOGETHER CURRENT ACCOUNT	2017 FEES	R500 TRANSACTION IN 2017	2018 FEES	R500 TRANSACTION IN 2018
Withdrawal (Own Bank)	R3,95 + R1,30 per R100	R10,45	R3,95 + R1,35 per R100	R10,70
Withdrawal (Other ATM)	R9,95 + R1,35 per R100	R16,95	R9,95 + R1,35 per R100	R16,95
Deposit (ATM)	R3,00 + R1,30 per R100	A	R3,95 + R1,35 per R100	R10,70
Debit Order (internal)	Free		Free	
Debit Order (internal)	R16,00		R16,95	
Account fee (Payment)	R40,00		R42,00	

ANNEXURE B

QUESTION 2.2

Home Made Bread Recipe

Ingredients

- 1 package ($\frac{1}{4}$ ounce) active dry yeast

- $2\frac{1}{2}$ cups warm water (110 ˚ F to 115 ˚ F)

- 3 tablespoons sugar
- 1 tablespoon salt
- 2 tablespoon canola oil
- $6\frac{1}{4}$ to $6\frac{3}{4}$ cups all- purpose flour

Method:

1. In a large bowl, dissolve yeast in warm water. Add the sugar, salt, oil and 3 cups flour. Beat until smooth. Stir in enough remaining flour, $\frac{1}{2}$ cup at a time, to form soft dough.

2. Turn on to floured surface, knead until smooth and elastic, about 8-10 minutes. Place in a greased bowl. Cover and let rise in a warm place until doubled, about $1\frac{1}{2}$ hours.

3. Punch dough down. Turn onto a lightly floured surface, divide dough in half. Shape each into a loaf. Place in two greased 9-inch ×5 inch loaf pans. Cover and let rise until doubled, about 30-45 minutes.

4. Bake at 375 ˚F for 30-45 minutes until golden and bread sounds hollow when tapped. Remove from pans to wire racks to cool. Yield: 2 loaves (16 slices)

ANNEXURE C

QUESTION 3.1

Account Statement of Ms Moroke for October 2018

AFFORDABLE CLOTHING STORE	
27 Plein Street Rustenburg Tel. 014 592 6178 Cell. 010 645 6681	Business hours: Monday to Friday 8:30 am to 5:00 pm Saturdays : 8:00 am to 12:00pm

STATEMENT	
Store Account Holder : Ms Moroke 05 Mokopi Street Tlhabane West Rustenburg	**Date** 01 October 2018
	Statement Period 01 September -30 September 2018
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	Account Number 40252650

SUMMARY

MONEY OWING ON PREVIOS PURCHASES   : R1 215,80
Interest on outstanding amounts is calculated at 31% per annum.

	THIS MONTH	LAST MONTH
Payment received:	R450,00	R320,00
Total Purchases for the Month	R975,00	R215,00
Total Refunds	R135,50	R0,00

TOTAL OWING :   R1 636,71
MINIMUM PAYMENT REQUIRED :   R327,34

DETAILED DISCRIPTIONOF PURCHASES

DATE	DESCRIPTION	CODE	DEBIT	CREDIT
01/10/18	Interest on money owing		A	
04/09/18	Payment received			R450,00
06/09/18	Men's jacket	J145875	R476,00	
15/09/18	Ladies dress	L552632	R135.50	
19/09/18	Kiddies shoes	C398710	R99,50	
23/09/18	Refund on returned item			R135,50
26/09/18	Ladies accessories	L764318	R77,50	
27/09/18	Kiddies wear	C444654	R129,50	
29/09/18	Men's sleepshirt	M265498	R57,00	

ANNEXURE D

QUESTION 3.2