



OR TAMBO INLAND DISTRICT

GRADE 10

JUNE EXAMINATIONS – 2023

MATHEMATICAL LITERACY PAPER ONE

MARKS: 50

DURATION: 1 HOUR

INSTRUCTIONS AND INFORMATION

1. This question paper consists of **THREE** questions. Answer **ALL** the questions.
2. Number the answers correctly according to the numbering system used in this question paper.
3. An approved calculator (non- programmable and non-graphical) may be used.
4. Start Each question on a **NEW** page.
5. Show All calculations clearly.
6. Write neatly and legibly.
7. Round off **ALL** Final answer to two decimal places unless otherwise.

This question paper consists of 5 pages.

QUESTION 1

Mr Zondi bought a grocery at Checkers and received the following till slip. Study the till slip below and answer the following questions:

CHECKERS

Columbine Square, 001- 4335160
Swartgoud & Columbine, Suiderood GAU/034138
TAX Invoice VAT NO. 4420106777

ALWAYS 8S		R23.99
CHECKOUT BAG CH		
2 @	R0.60	R1.20
DAWN 400ML		R19.99
DETOL CARE 175G		R12.99
DETOL EVEN 175G		R12.99
DETOL NRSH 175G		R12.99
DETOL POMG 175G		R12.99
DETOL RFRSH 175G		R12.99
DETOL SKIN 175G		R12.99
KELLOGGS 1KG		
2 @	R69.99	R139.98
XTRASAVE ALL BRAN		
2 @	-R22.00	-R44.00
NOLA 750G		R22.99
OLA GINELLI 1.4L		
2 @	R79.99	R159.98
XTRASAVE GINO GENELL		-R59.98
PCKLS CHILI 350G		R29.99
ROLL WHT HDOG 1S		R25.08
TOMATO SCE 500G		R31.99
XTRASAVE ALL GOLD		-R12.00
TPSTE ORIG2X100		R29.99
XTRASAVE FREE SHOP		-R447.14
TOTAL		R0.00
19 BALANCE DUE		R0.00

Today you saved R563.12
on our great deals



- 1.1.1 List all the negative numbers and explain the meaning of these numbers. (4)
- 1.1.2 Express the total amount saved for day in words. (2)
- 1.1.3 Write the following as a digit:
Nine hundred and eighty-two million (2)

1.2 Mr Zondi, has asked you to help with his bank statement. He is sure there are some errors on the bank statement as some things do not make sense to him. Below is a copy of Mr Zondi's statement.

First National Bank					
Mr S.M Zondi 03 Goldengate Phoenix 3140		Statement for January 2023		Account number:23456799 Southgate Branch Branch code: 211021	
Date	Details	Debit	Credit	Fees	Balance
1/1/23	Opening balance				R12 783,56
3/1/23	Deposit		R1 000,00	R15,00	R13 768,56
5/1/23	Payment: Con Cars	R876,45		R2,50	R12 889,61
5/1/23	Payment: M Smith	R2 000,00		R2,50	R10 887,11
12/1/23	EFT Purchase	R125,60		R1,00	A
26/1/23	Payment: S. Yusuf	R2 600,00		R2,50	R8 158,01
28/1/23	Salary		R11 560,00		R19 718,01

(Note: EFT means Electronic Fund Transfer)

- ▶ The fee for deposits is R2,00 plus R1,00 for every R100,00.
- ▶ Stop order payments cost R2,50 regardless of the amount.
- ▶ Card purchases cost R1,00 regardless of the amount
- ▶ Rent is Mr Zondi's biggest expense.

Use the above bank statement to answer the following questions:

- 1.2.1 Determine the missing value of A (2)
- 1.2.2 Mr Zondi claims that there is a mistake in the fee's column. Indicate where this mistake occurred and verify, with necessary calculations, whether his statement is valid or not. (4)
- 1.2.3 The bank has confirmed that there is indeed an error of R3 excess on his statement. If the error is correct, what should Mr Zondi's balance be on the 28 January 2023? (2)
- 1.2.4 Mr Zondi states that his fees for January 2023 will be more than R30, 00. Verify with necessary calculations, whether his estimation is valid or not. Keep in mind that the error has been corrected. (3)

[19]

QUESTION 2

Mr Zondi has a Top-Up 50 cellphone Contract which has the following features:

- R50 per month x 36 months
- Includes R50 airtime.
- Call rate: R2,50 per minute (or part thereof)

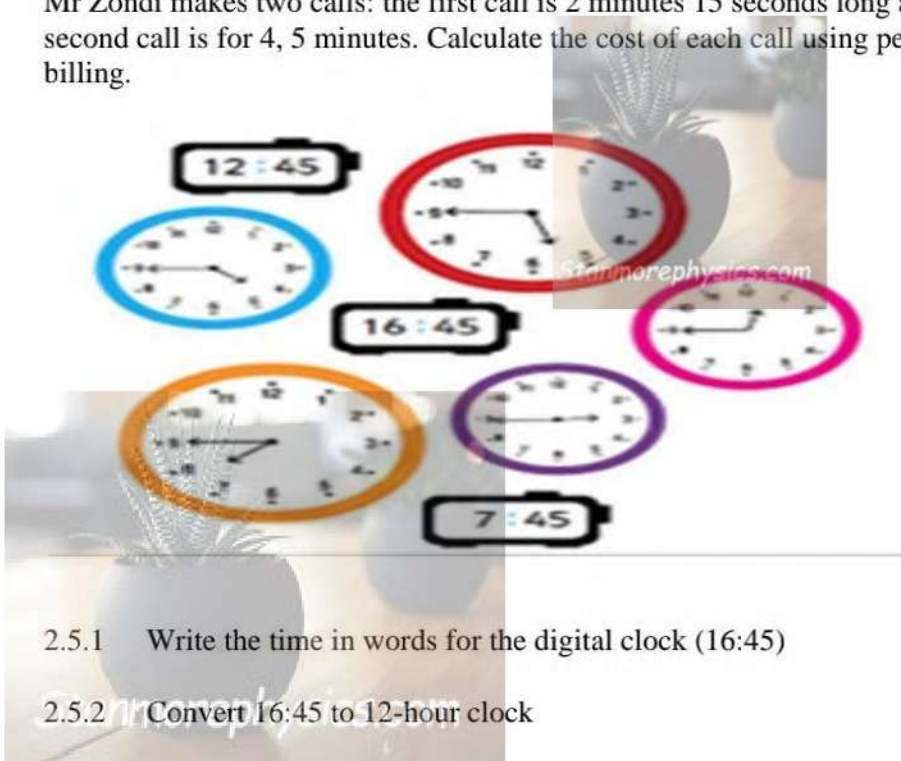
2.1 Write down how much is Mr. Zondi's monthly subscription. (2)

2.2 Mr Zondi took the contract in July 2020. Give the last month and year that he will be covered by his contract. (3)

2.3 Convert the R50 airtime into minutes, assuming that the call rate is R2,50 per minute. (2)

2.4 Mr Zondi makes two calls: the first call is 2 minutes 15 seconds long and the second call is for 4, 5 minutes. Calculate the cost of each call using per minute billing. (4)

2.5



2.5.1 Write the time in words for the digital clock (16:45) (2)

2.5.2 Convert 16:45 to 12-hour clock (2)

[15]

QUESTION 3

The data below represents the grade 10 Mathematical Literacy test percentage for learners at certain school.

45 47 34 48 47 42 39 22 54 17 32 67 25 39 34 64 47 50 62

- 3.1 Arrange the data in descending order. (2)
- 3.2 Define the term median and hence determine the median scores. (2)
- 3.3 Show that the range of the above data is 50%. (2)
- 3.4 Calculate the average percentage mark of this grade 10 test. (3)
- 3.5 Write down the modal percentage. (2)
- 3.6 Copy and complete the frequency table for Mathematical Literacy test percentage shown above. (5)

Interval	Tally	Frequency
0 – 29		
30 – 39		
40 – 49		
50 – 59		
60 – 69		
Total		

(5)

[16]

TOTAL [50]

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MATHEMATICAL LITERACY PAPER ONE

MARKING GUIDELINES

MARKS: 50

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table
F	Choosing the correct formula
SF	Substitution in a formula
J/O/E	Justification / Opinion / Explanation
P	Penalty
R	Rounding off / Reason
AO	Answer only
NPR	No penalty for rounding

This MARKING GUIDELINE consists of 3 pages.

QUESTION 1 [19]		
Ques.	Solutions	Explanation and Level
1.1.1	-44 ; -59.89 ; -12.00 ; - 447,14 ✓✓ (the amount saved) ✓✓	2RT: Accuracy L1 2 E Opinion L4 (4)
1.1.2	Five hundred and sixty three rands and twelve cents. ✓✓	2 A answer L1 (2)
1.1.3	982 000 000 ✓✓	2A answer L1 (2)
1.2.1	A= R10 886.11 - (125.60+1.00) ✓ R10 760.51 ✓	1 M: subtraction 1 CA: accuracy L1 (2)
1.2.2	Deposit fee is wrong. ✓ Fee= R2.00 +(R1.00 X 10) ✓ =R2.00 + R10 =R12 ✓ Kim's statement is Valid ✓	1 M identifying the mistake 1 M calculating the deposit fee 1 CA answer 1 O conclusion L4 (4)
1.2.3	Balance = R19 718.01 - R3.00 ✓ =R19 715.01 ✓	1 M: subtracting correct values 1A: accuracy L1 (2)
1.2.4	Fees = R12+ R2.50+R2.50+R1.00+R2.50+(R2.00+R1.00 x 115) = R20.5 +R117 ✓ = R137.50 ✓ More than R30 The statement is valid ✓	1M: adding all correct values 1 CA: accuracy 1 O conclusion L2 (3)
		[19]
QUESTION 2 [15]		
2.1	R50 ✓✓	2 A: Accuracy L1 (2)
2.2	$\frac{36}{12}$ ✓ = 3 years ✓ ∴ July 2023 ✓	1M: division by 12 1A: answer 1A: July 2023 L2 (3)
2.3	$\frac{50}{2.50}$ ✓ = 20 minutes ✓	1M: division 1A: accuracy L1 (2)
2.4	1 st Call: Total Cost = R2,50 x 3 ✓ = R7,50 ✓ 2 nd Call: Total Cost = R2,50 x 5 ✓ = R12,50 ✓	1M: multiplication 1A: accuracy 1M: multiplication 1A: accuracy L3 (4)
2.5.1	Quarter to five in the afternoon ✓✓	2 A: answer L1 (2)
2.5.2	4:45 pm ✓✓	2 A: answer L1 (2)
		[15]

QUESTION 3 [16]																							
3.1	67 ; 64 ; 62 ; 54 ; 50 ; 48 ; 47 ; 47 ; 47 ; 45 ; 42 ; 39 ; 39 ; 34 ; 34 ; 32 ; 25 ; 22 ; 17 ✓✓	2 A: arranging in descending order L1 (2)																					
3.2	Is the middle value in an arranged dataset ✓ Median = 45 ✓	1 E: explanation 1 A: answer L2 (2)																					
3.3	Range = highest value - Lowest value = 67% - 17% ✓ = 50% ✓	1 M: subtraction 1 A: accuracy L4 (2)																					
3.4	Average = $\frac{45+47+34+48+47+42+39+22+54+17+32+67+25+39+34+64+47+50+62}{19}$ = 42,89 = 43 ✓	1 M: adding all values 1 M: division by 19 1 R: rounding L3 (3)																					
3.5	Mode = 47% ✓✓	2 A: accuracy L1 (2)																					
3.6	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Interval</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>0-29</td> <td>///</td> <td>3</td> </tr> <tr> <td>30-39</td> <td>////</td> <td>5 ✓</td> </tr> <tr> <td>40-49</td> <td>//// </td> <td>6 ✓</td> </tr> <tr> <td>50-59</td> <td>///</td> <td>2 ✓</td> </tr> <tr> <td>60-69</td> <td>///</td> <td>3 ✓</td> </tr> <tr> <td>Total</td> <td></td> <td>19 ✓</td> </tr> </tbody> </table>	Interval	Tally	Frequency	0-29	///	3	30-39	////	5 ✓	40-49	////	6 ✓	50-59	///	2 ✓	60-69	///	3 ✓	Total		19 ✓	2 answers correct 1 mark 3 answers correct 2 marks 4 answers correct 3 marks 5 answers correct 4 marks 1 mark total frequency L4 (5)
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TOTAL = 50 MARKS		[16]																					