



EXAMINATIONS AND ASSESSMENT CHIEF DIRECTORATE

Home of Examinations and Assessment, Zone 6, Zwelitsha, 5600
REPUBLIC OF SOUTH AFRICA, Website: www.ecdoe.gov.za

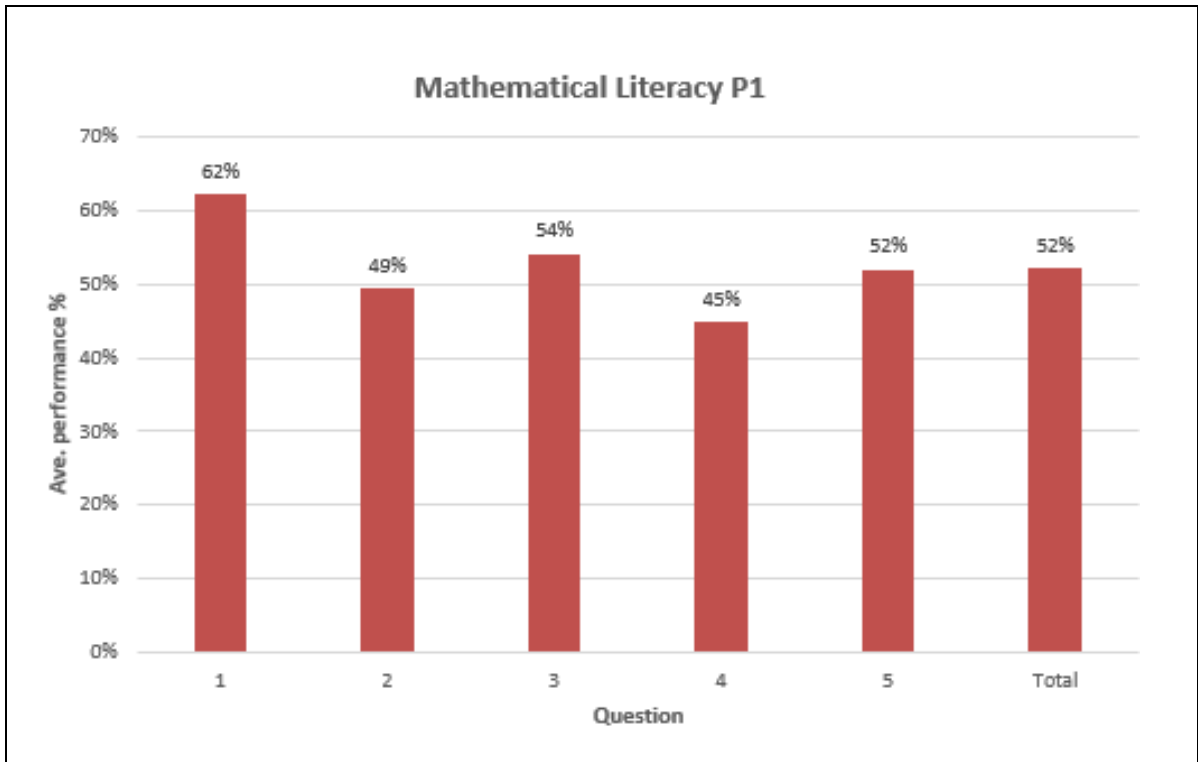
2022 NSC CHIEF MARKER'S REPORT

SUBJECT	MATHEMATICAL LITERACY		
QUESTION PAPER	1X	2	3
DURATION OF QUESTION PAPER	3 HOURS		
PROVINCE	EASTERN CAPE		
DATES OF MARKING	8-22/12/2022		

SECTION 1: (General overview of Candidate Performance in the question paper as a whole)

	<p>Generally, the learner performance is not as good as expected in most centres. With the new structure candidates were expected to perform well because they focus only on Finance, Data Handling and Probability in Paper 1.</p> <p>There are responses that show that some candidates lack basic mathematical literacy skills that should have been covered in grade 10 and 11 in 2020 and 2021 respectively.</p> <p>The 2022 grade 12 were the most affected by the Covid 19 lock down and rotational teaching in grades 10 and 11.</p> <p>They missed scoring marks in the questions that are meant to be easy since they were pitched at cognitive level 1.</p> <p>Some of these questions include the very first question 1.1.1 that required to identify the prices given in the table whether data is numerical or categorical. In this question 53% got 0 marks from the Rasch sample of 100 candidates.</p> <p>In 1.1.2 the question asked about the exchange rate, candidates got confused on what to extract from the table to correctly answer the question.</p> <p>Candidates performed poorly in the paper as seen from the Rasch sample of 100 scripts, at 52% overall pass.</p> <p>This is a sample of 100 scripts out of about 53 985 scripts and may not be a true reflection of the population. However, it gives a good insight on the performance especially the details about the questions. If the sample is to be represent performance of the 2022 candidates in Mathematical Literacy P1, then the results for the province in Mathematical Literacy may not be good especially in quality aspect.</p>														
	<p>The performance of the candidates in various questions as from the same sample indicate the following passes.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Question</td> <td style="width: 10%;">1</td> <td style="width: 10%;">2</td> <td style="width: 10%;">3</td> <td style="width: 10%;">4</td> <td style="width: 10%;">5</td> <td style="width: 10%;">Overall</td> </tr> <tr> <td>%Pass</td> <td>62</td> <td>49</td> <td>54</td> <td>45</td> <td>52</td> <td>52</td> </tr> </table>	Question	1	2	3	4	5	Overall	%Pass	62	49	54	45	52	52
Question	1	2	3	4	5	Overall									
%Pass	62	49	54	45	52	52									

The graph indicating the above results is sketched below.

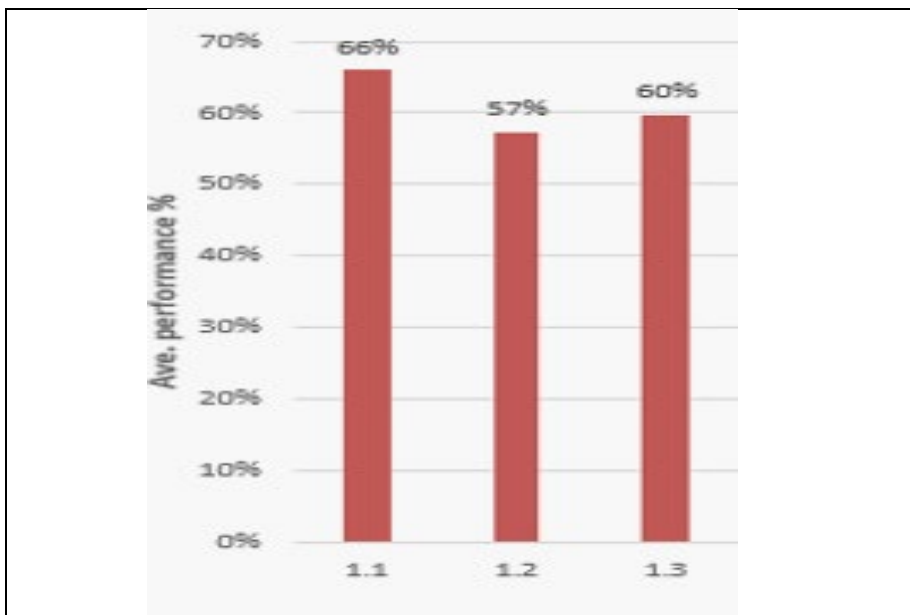


SECTION 2: Comment on candidates' performance in individual questions (It is expected that a comment will be provided for each question).

QUESTION 1

(a) General comment on the performance of candidates in the specific questions. Were the questions well answered or poorly answered?

This is a fairly well answered question at 62% Pass based on the Rasch sample with the subsection 1,1 at 66%, 1,2 at 57% and 1,3 at 60%. The graph presentation of the performance in question is shown below .



(b)	Why was the question poorly answered? Also provide specific examples, indicate common errors committed by candidates in this question, and any misconceptions.	
1.1	The findings from the marking process as to the mistakes candidates made are discussed below per sub-question.	
	1.1.1	Though the question was answered fifty-fifty Candidates could not differentiate between categorical and numerical data. Others even wrote both terms which means they could not understand what the question required.
	1.1.2	Candidates still confuse ascending and descending order. Some candidates arranged in descending order instead of ascending or missed one of the given values or even arranged the wrong column!
	1.1.3.	Most candidates were able to identify the cheapest store.
	1.1.4.	Multiplying the price by the number of socks in a pack.
	1.1.5.	Candidates still struggle with rounding. They rounded incorrectly. Challenge with the question is Rounding to context i.e., Rands and Cents. Second part is that of leaving cents having three digits e.g., R17,198 instead of R17,20. Third part is that of omitting Zero that is not shown by the calculator e.g., R1 251.5 instead of R1 251,50 (this applies also in the next question 1.1.5)
	1.1.5	They misunderstood the question or did not finish reading it, hence they multiplied the values/prices by the number of items to find the value of P. An emphasis on writing money in 2 decimal places must be made.
	1.1.6(a)	Could not define probability correctly according to the context so most could not get full marks.
	1.1.6(b)	Rounding was the problem. Most left the answer in 2 decimal places (Inability to read the instruction accurately)
1.2	The results from the sampled 100 scripts showed a performance of 49% on the question which means that more than half of the candidates couldn't answer the question correctly.	
	1.2.1.	Poorly answered by most learners as they had to define investment according to given context.
	1.2.2.	Some candidates multiplied the amount by 12 while others by 2 which indicated that they still can't read off the correct information from a given text.
	1.2.3	Poorly answered. The candidates could not interest earned over a period of 24-months.
	1.2.4.	This question was averagely answered by learners even though wasted time doing long calculations for only 2 marks.
1.3	Many answered the question correctly even though they didn't get full marks.	
	1.3.1	Most could identify that it's a bar graph but the type has various answers, e.g. combined, double, vertical etc.
	1.3.2	Most learners were able to identify the type of fuel needed

	1.3.3	It was answered fairly well. The challenge was with some learners who can't convert cents to Rands. Rounding to the nearest R0,50 was the first time rounding asked
(c) Provide suggestions for improvement in relation to Teaching and Learning.		
		Teachers must use CAPS document to guide them so that they teach candidates correctly and cover all parts of the topic.
		Share exam guidelines with the candidates so that they will know how to define terms used in a topic, write acronyms and all other relevant information.
		More written work should be given to candidates so that they will identify their mistakes and rectify them.
		Teachers must make sure they teach concept of rounding in contexts. Teaching candidates Data Handling, should be done thoroughly including the process and not only summary. There is a need to teach Candidates the skills of drawing and interpretation of graphs in various topics and contexts. The emphasis of using scale is fundamental and cannot be over-emphasized.
(d) Describe any other specific observations relating to responses of candidates		
		Educators should train their candidates to analyze the given extracts or tables or graphs well to use the correct information required by the question. This will prevent misunderstanding of the questions. Candidates must be told to skip a line when answering questions on their answer books because they mess up their numbering of answers. It was clear that these candidates struggled with the understanding of English as a language of teaching and learning.
(e) Any other comments useful to teachers, subject advisors and teacher development.		
		To develop workshop materials to use when training teachers in Data Handling. More emphasis should be on conversion, rounding off and decimal numbers(values). The first term or opening meeting must have educators assigned by the Subject Advisors to present the Chief Marker's report, Diagnostic report and Examination Guidelines.

QUESTION 2								
(a)	General comment in the performance of candidates in Question 2. Was the question well answered or poorly answered?							
	<p>The Question was generally poorly answered and from the sample, the performance indicates 49%. The performance in sub-questions from same sample indicate 59% in 2.1 and 38% in 2.2.</p> <p>This is the longest question based on various sub topics under finance for 34 marks.</p> <p>It was a question testing Finance which covers $60 \pm 5\%$ of the paper. Candidates must be taught well in Finance to pass Paper 1.</p> <div data-bbox="448 613 1246 1294" style="text-align: center;"> <table border="1" style="margin: auto;"> <caption>Mathematical Literacy P1 Performance Data</caption> <thead> <tr> <th>Sub-question</th> <th>Ave. performance %</th> </tr> </thead> <tbody> <tr> <td>2.1</td> <td>59%</td> </tr> <tr> <td>2.2</td> <td>38%</td> </tr> </tbody> </table> </div>		Sub-question	Ave. performance %	2.1	59%	2.2	38%
Sub-question	Ave. performance %							
2.1	59%							
2.2	38%							
(b)	Why was the question poorly answered? Also provide specific examples, indicate common errors committed by candidates in this question, and any misconceptions.							
2	<p>Despite the performance being good in this question at 59%, there are errors picked up during the marking. They are pointed out per sub-question.</p> <p>Language remains a challenge to most candidates whose English is a second language. This is reflected in Candidate's lack of understanding of questions or scenario especially in 2.2.</p>							
2.1		<p>2.1.1 Well-answered by most. Common error was to write down the account number incorrectly (missing 1 digit) e.g., 2388350</p> <p>2.1.2 Candidates managed to add the premiums but failed to deduct the discount to get the monthly premium after discount. Many attempted the question but very few obtained full marks</p> <p>2.1.3 Could not calculate percentage discount. Many only got 1 out 3 marks</p> <p>2.1.4 Many managed to write the correct amount (the excess value) but didn't know what to do about it.</p> <p>2.1.5 Candidates determined the 15% VAT but forgot to divide by 115 as the VAT was already included on the amount. E.g., $15/100 \times R2184,21$ which was zero marks.</p>						

	2.1.6	Incorrect reference made when doing comparison. E.g. VW Polo beautiful than a Toyota. Limited knowledge about cars and their insurances especially those from disadvantaged areas
	2.1.7	Inability to express what they want to say as the expected answer due to language barrier. Mostly answered correctly
2.2		Average was only 38% which indicate that the question was poorly answered due to the tariff tables that were given with information that confused them.
	2.2.1	Candidates are failing to understand the concept of rounding the verbatim struggle to round to the nearest ten.
	2.2.2	Candidates failed to understand the concept of reverse in tariffs, by looking for the price before increase.
	2.2.3	Tariff table in m ² and the one with increase from the previous confused the candidates. Some could identify the correct tariff and kl but didn't know what to do with the increase
	2.2.4	Another question that required explanation. Such question is a disadvantage to those who are having a challenge with language. They could not be able to express what they really wanted to say. In addition, it required to information from the previous question.
(c)	Provide suggestions for improvement in relation to Teaching and Learning	
	➤	Candidate should be prepared by teachers about the new format of paper 1, expecting L1 – L4 questions.
	➤	Learners should be taught terminologies in context.
	➤	Using different textbooks, find more resources.
	➤	Teachers should be able to allow the consistent teaching from grade 10 – 12.
	➤	Using old fashion/ learning with multiplication and division of numbers.
	➤	Teachers should teach the candidates to learn the subject of the formula also doing inverse calculations and calculating VAT when VAT is included and calculating values excluding VAT, when to divide by 1,15 or multiply by 1,15.
	➤	Teachers should encourage candidates to use and understand the use of different calculators, especially basic calculators with method.

QUESTION 3

(a)	General comment in the performance of candidates in the specific question. Was the question well answered or poorly answered?							
	<p>The question was performed at 54% slightly above average as from the sample. It was a question examining Data Handling for a total of 24 marks. It had a lot of reading with understanding the table in 3.1 and graph in 3.2.</p> <p>Percentage pass in 3.1 was 61% and 3.2 at 47%. Poor performance in question 3.2 was partly due failure to understand graph because of scale.</p> <p>The graph below shows the performance in 3.1 and 3.2 which was 61% and 47% respectively as from Rasch sample.</p> <div data-bbox="443 719 1377 1473" style="text-align: center;"> <table border="1" style="margin: auto;"> <caption>Mathematical Literacy P1 Performance Data</caption> <thead> <tr> <th>Sub-question</th> <th>Ave. performance %</th> </tr> </thead> <tbody> <tr> <td>3.1</td> <td>61%</td> </tr> <tr> <td>3.2</td> <td>47%</td> </tr> </tbody> </table> </div>		Sub-question	Ave. performance %	3.1	61%	3.2	47%
Sub-question	Ave. performance %							
3.1	61%							
3.2	47%							
(b)	Why the questions poorly answered? Also provide specific examples, indicate common errors committed by candidates in this question, and any misconceptions.							
3	<p>Overall performance for question 3 is 54% pass rate which is also not a good performance for Data Handling question. There are a few that obtained zero in the question.</p> <p>The performance in 3.1 was better at 61% and poor in 3.2 at 47% was the challenging that was best on graph of unemployment rate. Performance mainly caused by the failure of the candidates to understand what is asked. E.g. 3.1.1. show how a value was calculated. Some also add the value that they have to show.</p>							
3.1	3.1.1	Well answered.						

		Most candidates could correctly read data and show the value from the table while others were adding the value they have to show..
	3.1.2	Poorly answered. Variety of reasons were given by candidates but the marking guidelines would not allow them. E.g. The actual workplace values differ from those in the table because other workers were working from home due to COVID restrictions. The correct answer was about rounding or the value are given in ten thousands.
	3.1.3	Most identified the correct value but could not write it in ten thousands.
	3.1.4	Correctly answered by most candidates. It was question that had many possible answers as it required one example of a job that cannot be done by working from home.
	3.1.5	Well answered Mean concept understood very well. The issue of rounding seems is still a problem
3.2		The performance in this question is at 47% which is below average
	3.2.1	A fairly answered sub question.
	3.2.2	Well answered except for few who could not understand that the question required to determine the number of unemployed people in the Quarter 3.
	3.2.3	Poorly answered sub question because candidates were struggled to read values from graph in order to determine the increase. The issue of scale.
3.2	3.2.4	Worst poorly answered question in this sub question. Most didn't know where to start which may probable be because of the failure to understand the question. Most calculated 34,4% instead of 65,5%
(c)	Provide suggestions for improvement in relation to Teaching and Learning	
	➤	Educators must train the candidates to read the given information and preamble thoroughly before answering the questions.
	➤	Questions with tables and figures must be practiced more in the classroom to get candidates familiarised with these types of questions.
	➤	Educators must use English as a medium of teaching when explaining maths literacy questions, to enable candidates to get used to some key vocabulary in maths literacy and life in general since maths literacy questions are based on everyday life occurring's.
	➤	Mathematical literacy Educators must attend memo discussions to present possible different candidates' responses and approaches. These memo discussions develop teachers especially the novice teachers.

	➤	Candidates must be exposed to many different scenarios of different context both familiar and unfamiliar context.
	➤	Must go out of the box of grade 12 work, emphasize connectivity and/or integration of previous grades work versus the current grade's work.
	➤	Candidates must be exposed to different type of questions in calculations of the mean, using the mean in calculation and as well same to be applied to other concept of data handling.
	➤	Educators must adapt on tactful reinforcing the concepts than drilling the concepts, so that the candidates could have an open mind on answering questions
(d) Describe any other specific observations relating to responses of candidates and comments that are useful to teachers, subject advisors, teacher development etc.		
	➤	Candidates must be made aware not to use the “%” on their calculators when they see “100%” but rather treat it as a unit and add it to their final answer at the end of their simplification.
	➤	Candidates must be reminded by educators that whole is 100%. If you are given that 34,4% was the unemployment rate for Quarter 2 to determine the rate of employed one has to use $100\% - 34,4\% = 65,6\%$. So that if 34,4% is represented by 7,6 million unemployed Then the employed 65,6% will be 14 493 023 This is a question that could be solved using ratios as one of the methods.
(e) Any other comments useful to teachers, subject advisors and teacher development		
		Candidates must be taught different scenarios of using percentages. Candidates continue to struggle to handle large numbers despite questions are on use of large numbers. For example, use of millions, billions and trillion in questions. Educators need to emphasize this section. Working with numbers written in words and to convert them to numbers with zeros

QUESTION 4

<p>Section 2: Comment on candidates' performance in individual questions (It is expected that a comment will be provided for each question on a separate sheet).</p>							
<p>(a)</p>	<p>General comment in the performance of candidates in the specific question. Was the question well answered or poorly answered?</p>						
<p>The performance in question was at 44% in 4.1 and 47% in sub-question 4,2. This translated in 45% pass. This was the worst performed as from the sample.</p> <p>The details of the errors as observed from the marking are explained below according to sub-questions.</p> <p>The graph is a representation of the results of the sample.</p>							
<div style="text-align: center;"> <p>Mathematical Literacy</p> <p>P1</p> <table border="1"> <caption>Mathematical Literacy P1 Performance Data</caption> <thead> <tr> <th>Sub-question</th> <th>Ave. performance %</th> </tr> </thead> <tbody> <tr> <td>4.1</td> <td>44%</td> </tr> <tr> <td>4.2</td> <td>47%</td> </tr> </tbody> </table> </div>		Sub-question	Ave. performance %	4.1	44%	4.2	47%
Sub-question	Ave. performance %						
4.1	44%						
4.2	47%						
<p>(a)</p>	<p>Why the questions poorly answered? Also provide specific examples, indicate common errors committed by candidates in this question, and any misconceptions.</p>						
<p>4.1</p>	<p>New way of asking taxation was confusing to the candidates even though it was the easiest way. It showed that the teaching is not emphasizing the understanding of the concepts.</p>						
<p>4.1.1.</p>	<p>Candidates are familiar with annual tax table, but not the monthly table. Couldn't follow BODMAS after substitution to simplify the brackets first. Others had wrong substitutions.</p>						
<p>4.1.2.</p>	<p>Couldn't see that the question was a follow up from 4.1.1. so, they repeat 4.1.1 in 4.1.2 before they continued. Most got confused and didn't know where to start and end.</p>						
<p>4.1.3.</p>	<p>Different responses were written by candidates but most understood the concept of probability. Answers included 0; or 0% or impossible or $\frac{0}{3}$</p>						
<p>4.2</p>	<p>Question performed at 47% slightly better than 4.1 but still below average indicates poor performance in the whole question.</p>						

	4.2.1	Mostly identified and correctly wrote the number in words while others had a language issue. Others had difficulty in differentiating between millions, thousands and hundreds
	4.2.2	Ratios not put in correct order and even if correct values, they continue working and therefore lose marks. It was not asked to simplify the ratio and some went ahead to. This indicated that candidates do not read with understanding.
	4.2.3	Concept of the median understood and answered well. Those got it wrong was their failure to not arrange data before finding the median.
	4.2.4	Working with data represented in Pie Charts is still a challenge to many
	4.2.5	A fairly answered question, a few candidates who knew the formula of IQR and substituted correctly. Most candidates did not remember the formula or could not substitute in the formula for IQR correctly. Changing the subject of the formula challenged some leading to a wrong answer despite correct substitution. Was for very few
	4.2.6	This question was removed as it was unanswerable.
	4.2.7	Candidates struggled to determine the probability as a % from the values given. Percentage calculations still a problem to many.
(c)	Provide suggestions for improvement in relation to Teaching and Learning	
	➤	Teachers to practice candidates with formulae substitutions extensively with various subjects to drill them understanding the relationship of the formulations.
	➤	Explaining to candidates the importance of having their own calculators and timeously to practice its use.
	➤	Teaching taxation in a way that learners understand the concepts.
(d)	Describe any other specific observations relating to responses of candidates and comments that are useful to teachers, subject advisors, teacher development etc.	
	➤	New educators must be trained by subject advisors with the latest NSC papers at various levels in line with the Chief marker's reports published from time to time so as to fill the gaps in candidate attainment.
	➤	Special mention in addressing the logical questions and how to answer them to be emphasized with worked out exercises
	➤	Subject advisors and educators are urged to intervene with the latest model of questions and to use the CAPS document in aligning the exercises frame worked for using in classrooms
	➤	In the areas of candidates with language barriers to address with special attention in understanding the concepts and additional exercises to be used for the candidates to get familiar to adopt the situation.

(e)	Any other comments useful to teachers, subject advisors and teacher development							
	Subject advisors must moderate common / school framed assessments set by educators before administering so as to minimize the wide gap among common understanding on various issues highlighted above.							
QUESTION 5								
(a)	General comment in the performance of candidates in the specific question. Was the question well answered or poorly answered?							
	<p>At 52% the question was averagely answered. The sub question 5.1 was performed better at 64% and the 5.2 at 44% pulled down the question 5 percentage. The graphs of performance are shown below.</p> <div data-bbox="411 629 1294 1323" style="text-align: center;"> <table border="1" style="margin: auto;"> <caption>Mathematical Literacy P1 Performance Data</caption> <thead> <tr> <th>Sub-question</th> <th>Ave. performance %</th> </tr> </thead> <tbody> <tr> <td>5.1</td> <td>64%</td> </tr> <tr> <td>5.2</td> <td>44%</td> </tr> </tbody> </table> </div>		Sub-question	Ave. performance %	5.1	64%	5.2	44%
Sub-question	Ave. performance %							
5.1	64%							
5.2	44%							
(b)	Why the questions poorly answered? Also provide specific examples, indicate common errors committed by candidates in this question, and any misconceptions.							
5.1.1.	Fairly answered. Candidates were able to write down the province that contributed the most. it was a question that required to read the line graphs.							
5.1.2	Poor interpretation of the question. The concept of the ratios was ignored by the learners, they used 4% instead of using all the total percentages of the provinces and they didn't convert the word form of billion to numerical form							
5.1.3	Well answered Candidates were able to see the transport sector for KZN of a 12% line.							
5.1.4	Well answered Candidates were able to identify the concept of range							
5.15	Well answered							

		Candidates were able to identify the province which contributed the most
	5.1.6	Poorly answered Candidates were unable to interpret the two-way table for exchange rates.
5.2		
	5.2.2	Fairly answered Candidates were unable to work out fractions and exchange rate given in the form of a table not in the form of a ratio
	5.2.3	Fairly answered Candidates were confused by the exchange rate given in two columns in the table and ended up using wrong exchange rate
	5.2.4	Fairly answered Candidates were unable to make a distinction in weak and strong currency
	5.2.5	Poorly answered question. They used wrong principal amount. Conversion of years to months and vice versa is a challenge. Identification of the principal amount and the conversion of 8 months to years. Difference between simple interest and compound interest is a challenge
(c)	Provide suggestions for improvement in relation to Teaching and Learning.	
	➤	Exposure to fractions and its simplifications.
	➤	Multiple graphs interpretations.
	➤	Exchange rate exposure in a ratio and two-way table Conversion
	➤	doing more questions and emphasis on conversions and correct substitution. Candidates to be trained in all types of conversions both ways as well as the exchange rate calculations. Need to emphasize the importance of usage of units at all levels in every calculation
(d)	Describe any other specific observations relating to responses of candidates and comments that are useful to teachers, subject advisors, teacher development etc.	
	➤	Failing to do conversion
	➤	Failing to interpret graphs
	➤	Unable to determine interest without the use of the formula.
(e)	Any other comments useful to teachers, subject advisors and teacher development.	
	➤	Emphasis on calculations of interests without formula and other related questions of capital and finance.



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P1

NOVEMBER 2022

MARKS: 150

TIME: 3 hours

This question paper consists of 13 pages and an addendum with 2 annexures.



* M L I T E 1 *



INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions. Answer ALL the questions.
2. Use the ANNEXURES in the ADDENDUM to answer the following questions:

ANNEXURE A for QUESTION 2.1
ANNEXURE B for QUESTION 4.2
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
6. Show ALL calculations clearly.
7. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
8. Indicate units of measurement, where applicable.
9. Diagrams are NOT necessarily drawn to scale, unless stated otherwise.
10. Write neatly and legibly.



QUESTION 1

1.1

Martha needs to buy school uniforms for her son and daughter. She compares the prices of three different stores as shown in TABLE 1 below.

TABLE 1: COST OF SCHOOL UNIFORMS AT THREE DIFFERENT STORES

ITEMS	STORE A	STORE B	STORE C
White shirt	R110,00 for 2	R44,99 each	R110,00 for 2
Grey skirt	R163,00 for 2	R54,99 each	R130,00
Grey shorts	R186,00	R39,99	R99,95
Grey school socks	R40,50 for 2 packs	R18,99 per pack	R89,99 for 3 packs
White school socks	R85,00 for 5 packs	R11,99 per pack	R85,99 for 5 packs
School shoes (girls)	R349,00	R159,99	R170,00
School shoes (boys)	R318,00	R169,99	R275,00
TOTAL	P	---	---

[Adapted from www.news24.com/fin24/money/education]

NOTE:

There are two pairs of socks in each pack.

Use TABLE 1 above to answer the questions that follow.






- 1.1.1 Identify whether the prices given in TABLE 1 are numerical or categorical data. (2)
- 1.1.2 Arrange, in ascending order, all the prices given for Store B. (2)
- 1.1.3 Name the store that sells the cheapest grey shorts. (2)
- 1.1.4 Calculate the price for a pack of white school socks at Store C. (3)
- 1.1.5 Determine the missing value **P**, if Martha bought all the school items as advertised at Store A. (2)
- 1.1.6 The probability of selecting Store C to buy all the school items is 0,3333333333.
- (a) Define the term *probability* in the given context. (2)
- (b) Write down this probability as a percentage rounded to the nearest whole number. (2)



1.2

One of the many investment options in South Africa is the stokvel option. TABLE 2 below shows two stokvel plans (Plan A and Plan B) over a 24-month period.

TABLE 2: TWO STOKVEL PLANS

	
PLAN A (MONTHLY FIXED TERM PLAN)	PLAN B (ONCE-OFF SAVING PLAN)
Choose how long you want to save for.  Saving period: 24 months How much do you want to save monthly ?  Monthly contributions: R2 500 Total amount at the end of 24 months: R74 286,84	Choose how long you want to save for.  Saving period: 24 months How much do you want to save once-off ?  Once-off amount: R60 000 Total amount at the end of 24 months: R92 065,71

[Adapted from <https://uasv.co.za>]

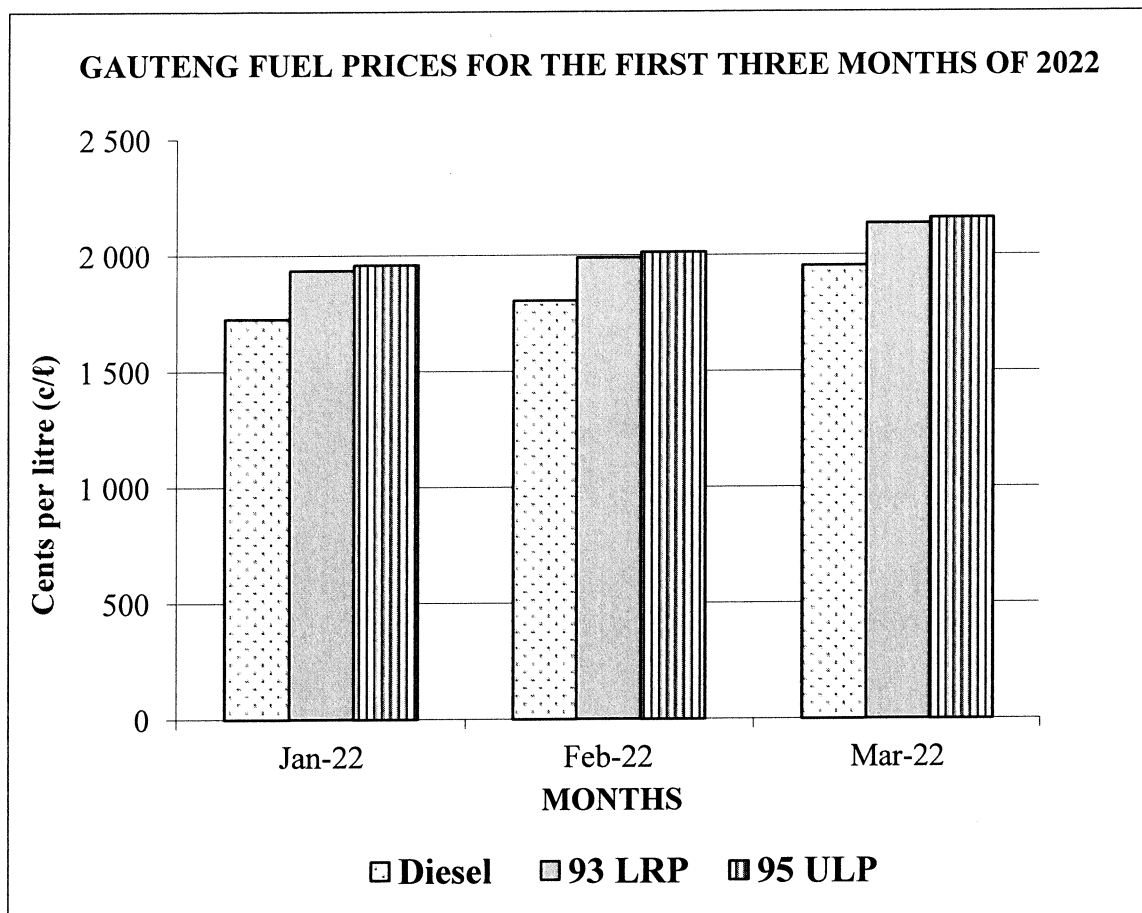
Use TABLE 2 above to answer the questions that follow.

- 1.2.1 Define *investment* in the given context. (2)
- 1.2.2 Calculate the total contributions for Plan A over the 24-month period. (2)
- 1.2.3 Calculate the interest earned if a person invests in Plan B over the 24-month period. (2)
- 1.2.4 Determine how much more interest a person will earn investing in Plan B compared to investing in Plan A over the same 24-month period. (2)



1.3

The graph below shows (in cents/litre) the prices of three types of fuel in Gauteng for the first three months of 2022.



NOTE:

93 LRP = Lead Replacement Petrol

95 ULP = Unleaded Petrol

[Adapted from www.sapia.org.za]

Use the graph above to answer the questions that follow.

1.3.1 Name the type of graph drawn above. (2)

1.3.2 Identify the type of fuel that cost the most in February 2022. (2)

1.3.3 The price of diesel in March 2022 was 1 955,28 c/l.

Write this price in rand per litre. Round off your answer to the nearest R0,50.

(3)

[30]



QUESTION 2

2.1

ANNEXURE A shows a summary of Bomvana's Vehicle and Household Insurance Policy.

Use ANNEXURE A to answer the questions that follow.

- 2.1.1 Write down the policy number of Bomvana's insurance policy. (2)
- 2.1.2 Determine the missing value A, the monthly premium for the VW Polo. (4)
- 2.1.3 Bomvana qualifies for a discount on his insurance premiums as he has insured many items.
- Calculate the percentage discount that he receives if the total monthly premium before the discount was R2 450,36. (3)
- 2.1.4 Bomvana was involved in a motor vehicle accident during July 2022. The quotation for damages from the panel beaters was R43 520,00.
- Determine the amount the insurance company will pay the panel beaters. (2)
- 2.1.5 Calculate the amount of VAT included in the total monthly premium. (3)
- 2.1.6 The premium for the Toyota Corolla is much lower than that of the VW Polo.
- Give ONE possible reason for this big difference in the premium amount. (2)
- 2.1.7 Bomvana pays a MiHome premium for household content cover to the value of R200 000. After the household contents were evaluated for insurance purposes, he bought an additional lounge suite.
- Explain how the purchase of this new item will affect his MiHome content premium. (2)




2.2


The sanitation tariffs for Johannesburg and Cape Town are presented in TABLE 3.

Johannesburg uses the area of a property to determine the sanitation bill. Cape Town uses a percentage of the total water usage to determine the sanitation bill (the same way as they calculate the water bill.)

TABLE 3 shows the tariffs of Johannesburg (excluding VAT) and Cape Town (including VAT).

TABLE 3: SANITATION TARIFFS FOR JOHANNESBURG AND CAPE TOWN

JOHANNESBURG: SANITATION TARIFFS – DOMESTIC (VAT excl.)		
	● Up to and including 300 m ²	R228,06
	● Larger than 300 m ² to 1 000 m ²	R443,96
	● Larger than 1 000 m ² to 2 000 m ²	R671,63
	● Larger than 2 000 m ²	R967,71

CAPE TOWN: SANITATION TARIFFS – DOMESTIC (VAT incl.)			
	USAGE	TARIFF	INCREASE FROM PREVIOUS
	● 0–4,2 kℓ	R16,03 per kℓ	R0,66 increase per kℓ
	● 4,2–7,35 kℓ	R22,02 per kℓ	R0,91 increase per kℓ
	● 7,35–24,5 kℓ	R30,92 per kℓ	R1,28 increase per kℓ
	● 24,5–35 kℓ	R48,65 per kℓ	R2,01 increase per kℓ

[Adapted from www.pikitup.co.za and www.capetown.gov.za]

NOTE: Sanitation refers to waste water that is drained from a household.

Use the information above to answer the questions that follow.

2.2.1 Write down, to the nearest ten cents and excluding VAT, the cost for sanitation in Johannesburg if a property is 175 m². (2)

2.2.2 Calculate the cost for 4,1 kℓ sanitation in Cape Town before the increase. (4)

2.2.3 Mr Jones lives in Johannesburg and Ms Brown lives in Cape Town. They both own a property with an area of 550 m² and each was billed for 22 kℓ sanitation.

Use the table above to determine the difference in the cost of sanitation for the two properties. (8)

2.2.4 Explain how the tariff system used in Johannesburg is beneficial to home owners in terms of water usage. (2)

[34]



QUESTION 3

3.1

TABLE 4 below shows the number of people per province working in TWO workplaces, namely Usual Workplace (UWP) and Work From Home (WFH) for the last quarter of 2020 and the first quarter of 2021.

TABLE 4: PEOPLE PER WORKPLACE BY PROVINCE

PROVINCES	LAST QUARTER 2020 (IN TEN THOUSANDS)			FIRST QUARTER 2021 (IN TEN THOUSANDS)		
	UWP	WFH	Total	UWP	WFH	Total
Western Cape	147,7	21,7	169,3	150,8	18,4	169,2
Eastern Cape	72,3	7,2	79,6	84,9	5,6	90,5
Northern Cape	24,2	0,5	24,7	23	0,5	23,5
Free State	56,9	3,2	60,1	53,4	2,9	56,3
KwaZulu-Natal	199,9	9,4	209,3	193,1	9,5	202,6
North West	46,4	2,4	48,8	51,3	3,1	54,4
Gauteng	342,4	36,6	379	365,9	33,1	399,0
Mpumalanga	93,8	5,8	99,6	98	5,7	103,7
Limpopo	91,4	6,3	97,7	95,6	4,7	100,3
TOTAL	1 075	---	1 168,1	1 116	83,5	1 199,5

[Adapted from www.statssa.gov.za]

Use TABLE 4 above to answer the questions that follow.

- 3.1.1 Show how the total value of 83,5 for South Africa was calculated. (2)
- 3.1.2 Give ONE reason why the values in the table will differ from the actual workplace values. (2)
- 3.1.3 Write down the number of people who worked at their usual workplaces (UWP) in Gauteng during the first quarter of 2021. (2)
- 3.1.4 Give ONE example of a job that cannot be done by working from home. (2)
- 3.1.5 Calculate the mean number of people in the WFH category for South Africa in the last quarter of 2020. (4)



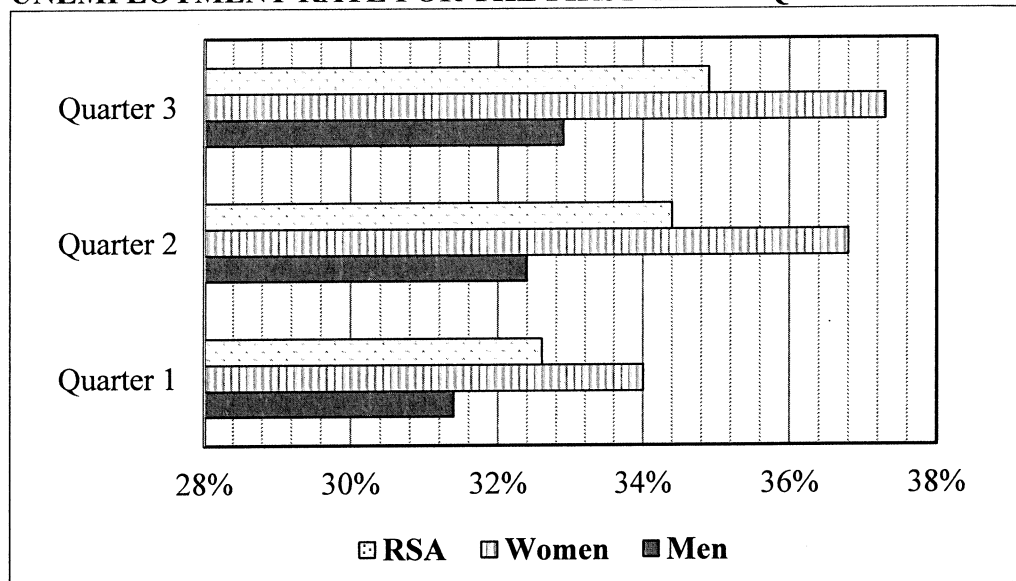
3.2

South Africa's unemployment rate increased from 34,4% in Quarter 2 to 34,9% in Quarter 3 of 2021.

The number of unemployed people in Quarter 2 was 7,6 million, which is 183 000 less than in Quarter 3.

The graph below indicates the unemployment rate for the different genders and the total for South Africa for the first three quarters of 2021.

UNEMPLOYMENT RATE FOR THE FIRST THREE QUARTERS OF 2021



[Adapted from Statistics South Africa]

Use the information above to answer the questions that follow.

- 3.2.1 Write down the quarter which showed the highest rate of unemployed men. (2)
- 3.2.2 Calculate the number of unemployed people in Quarter 3. (3)
- 3.2.3 Determine the increase in percentage of unemployed women from Quarter 1 to Quarter 3 in 2021. (3)
- 3.2.4 The unemployment rate for Quarter 2 was 34,4%.
Determine the number of people employed in South Africa during Quarter 2. (4)

[24]



QUESTION 4

4.1 Mr Louw, aged 53, earned an annual taxable income of R495 602 for the year ending 28 February 2022. He does not contribute to any medical aid.

Use the above information to answer the questions that follow.

4.1.1 The following formula can be used to calculate annual tax payable before the rebate:

$$\text{Annual Tax Payable before the rebate} = \text{R115 762} + [36\% \times (\text{annual taxable income} - 488\ 700)]$$

Use this formula to calculate Mr Louw's annual tax payable before the rebate. (3)

4.1.2 Mr Louw feels that the monthly tax table is an easier option for him to calculate his monthly tax payable.

TABLE 5 below shows the monthly deductions for three income categories for the year ending 28 February 2022.

TABLE 5: MONTHLY DEDUCTION TAX TABLE FOR THREE INCOME CATEGORIES FOR THE YEAR ENDING 28 FEBRUARY 2022

Monthly Income	Tax payable per age group		
	Under 65	65–74	Over 75
R41 241–R41 291	R8 473	R7 723	R7 473
R41 292–R41 342	R8 491	R7 741	R7 491
R41 343–R41 393	R8 510	R7 760	R7 510

The monthly rebate for a person younger than 65 years old is R1 368,75.

Verify, showing ALL calculations, whether his monthly tax will be correct according to the monthly deduction table. (6)

4.1.3 Write down the probability of selecting a monthly tax amount of R8 473 for a person over 75 years from this monthly tax table. (2)



- 4.2 The pie charts on ANNEXURE B compare the five best-selling vehicles in South Africa, America and Canada for 2021.

Use ANNEXURE B to answer the questions that follow.

- 4.2.1 Write down, in words, the total number of vehicles sold in America. (2)
- 4.2.2 Express as a ratio in the form $_ : _ : _$, the number of Toyota RAV4s sold in America, Canada and South Africa respectively. (2)
- 4.2.3 Write down the median number of the best-selling vehicles in South Africa. (2)
- 4.2.4 Determine the number of Ford F-series vehicles sold in Canada. (3)
- 4.2.5 The interquartile range for the top 10 vehicles sold in South Africa is 7 669 and the value of Quartile 1 is 11 408.
Calculate the value of Quartile 3. (4)
- 4.2.6 The inflation rate in America for 2021 was 7% and in 2020 it was 1,4%.
The price of a Ford F-series vehicle in 2022 is \$32 332.
It is stated that the price of the Ford F-series vehicle in 2019 was more than \$29 800.
Verify, showing ALL calculations, whether this statement is valid. (6)
- 4.2.7 Determine, as a percentage, the probability of purchasing a Ram Pickup in America. (3)

[33]



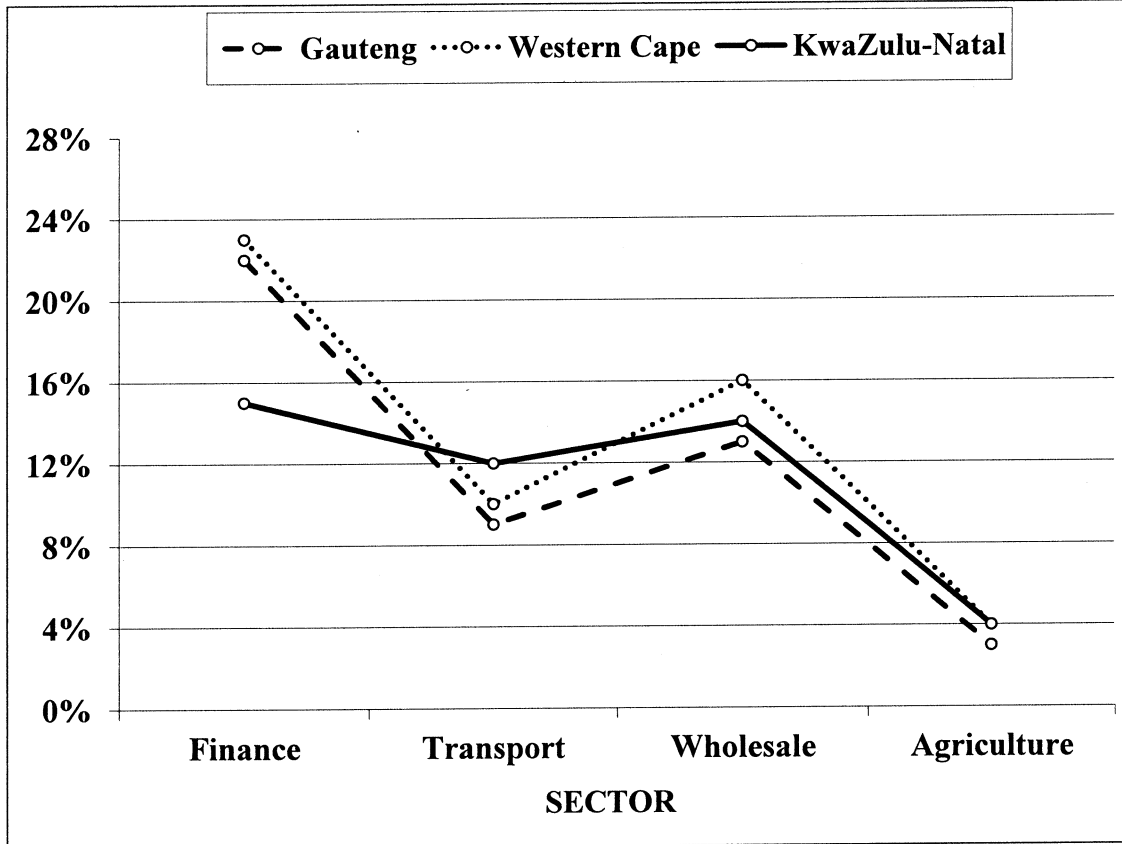
QUESTION 5

5.1 During the 2008–2012 period, South Africa recorded an average growth rate of just over 2%, largely due to the global economic recession.

Gauteng, KwaZulu-Natal and the Western Cape collectively contributed a significant portion to the country's growth.

The graph below shows the contributions of these three provinces towards the different sectors.

CONTRIBUTIONS OF THREE PROVINCES TO THE COUNTRY'S GROWTH



[Adapted from www.statssa.gov.za]

NOTE: A global economic recession leads to a drop in a country's economy.

Use the above information to answer the questions that follow.

- 5.1.1 Write down the province that contributed the most to the wholesale sector. (2)
- 5.1.2 The total amount contributed by the three provinces to agriculture was R8,3 billion. Determine which part of this amount Western Cape contributed. (4)
- 5.1.3 Identify the sector in which KwaZulu-Natal made a 12% contribution. (2)
- 5.1.4 Name the sector that has the largest range. (2)
- 5.1.5 Name ONE province that made the most significant contribution towards the growth of most of the sectors. (2)



5.2

Ryan is a South African citizen who owns a company in South Africa and wants to buy shares in a company in Canada.

TABLE 6 shows the exchange rate for five countries on 17 March 2022.

TABLE 6: EXCHANGE RATE FOR FIVE COUNTRIES ON 17 MARCH 2022

CURRENCY	UNITS PER ZAR	ZAR PER UNIT
Euro	0,060673	16,480
British pound	0,050862	19,662
Japanese yen	7,9596	0,12565
Canadian dollar	0,084845	11,785
Russian rouble	6,97481	0,143373

[Adapted from www.xe.com/currencyconverter]

NOTE: A share is a unit of ownership of a company.

Use TABLE 6 to answer the questions that follow.

- 5.2.1 Identify the currency which is the weakest against the rand. (2)
- 5.2.2 Show how the Russian rouble of 0,143373 ZAR per unit was determined. (2)
- 5.2.3 Ryan decides to invest R1 230 000 in shares in a Canadian company.
Convert R1 230 000 into Canadian dollar (CAD). (3)
- 5.2.4 Give ONE reason why you would motivate Ryan to invest in a Canadian company. (2)
- 5.2.5 After 2 years and 8 months, Ryan sold his shares and received a final amount of R1 529 360.

In South Africa Ryan would have received an interest rate of 8,1%, compounded annually, for 2 years and 8 months.

Ryan stated that he earned more than R14 000 return on his foreign investment compared to a potential South African investment.

Verify, showing ALL calculations, whether Ryan's statement is valid. (8)
[29]

TOTAL: 150





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Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P1

ADDENDUM

NOVEMBER 2022

MARKS: 150

This addendum consists of 3 pages with 2 annexures.



ANNEXURE A

QUESTION 2.1

SUMMARY OF CAR AND HOUSEHOLD INSURANCE POLICY

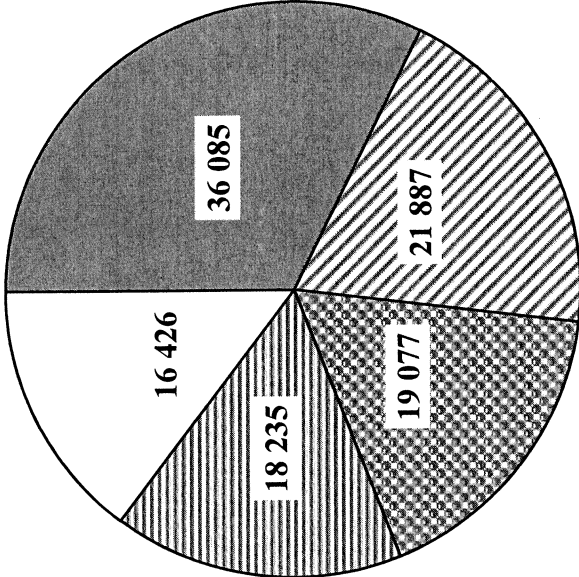
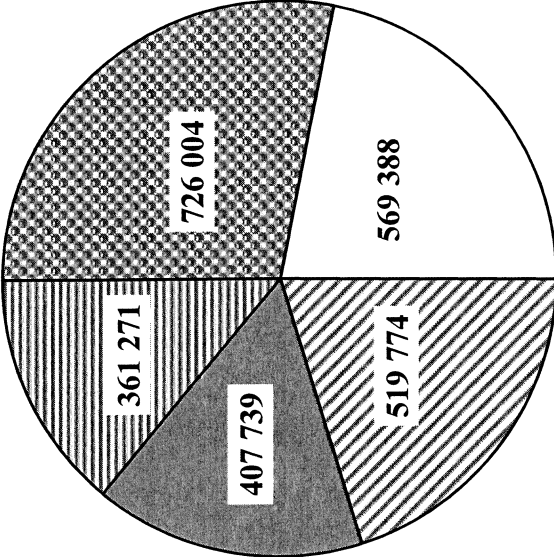
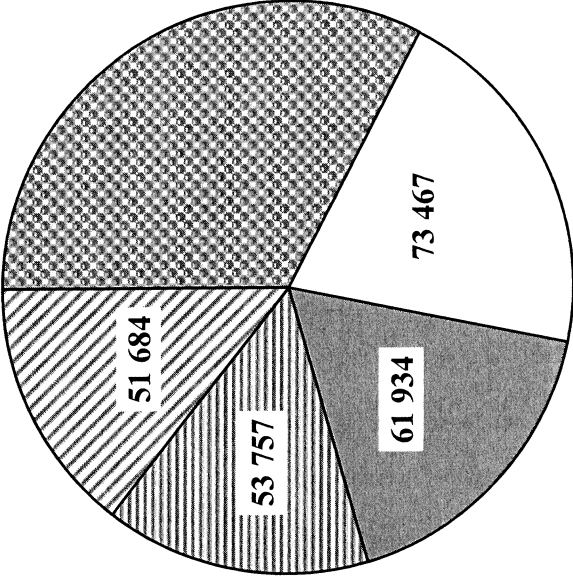
Car & Household Insurance		BiWay .co.za	
Client Number	22506623	Commencement Date	1 September 2013
Policy Number	23388350	Statement Date	30 August 2022
<input checked="" type="checkbox"/> Policyholder			It's all about you!
Name	BOMVANA	ID number	780801*****
Physical address	2* Patr*** S*r*et; R*s**l,Bl**d*w**	Work number	021***8***
E-mail address	we*****@gmail.com		
Mobile number	083***118*		
Summary of Cover			
Insured Items		Premium	
MiPersonal Accident	R25 000	R7,16	
MiWheels – Car 1	KIA PICANTO 1.1 LX -2004	R200,41	
– Car 2	TOYOTA COROLLA 1.6 -2013	R520,41	
– Car 3	FORD IKON 1.6i -2005	R133,16	
– Car 4	VW POLO 1.0 TSI -2019	A	
MiHome Content	BOMVANA'S RESIDENTIAL ADDRESS	R201,79	
MiMovables		R23,30	
RoadCover		R9,07	
Total Discount	For having the above noted multiple insured items on cover	-R266,15	
Total Monthly Premium (including 15% VAT)			R2 184,21
Excess Value: <i>The excess is the amount payable by YOU to the service provider whenever you make a claim.</i> <i>The values below show the excess amount that you will have to pay in case of a specific claim event.</i>			
• Accident and Intentional Damage			R7 000,00
• Theft and Hijacking			R7 000,00
• Window glass only claim (not glass forming part of roof)			R1 490,00
• Earthquake, Storm, Hail, Flood and Snow			R7 000,00
• Fire and Explosion			R7 000,00

[Adapted from miway.co.za]

ANNEXURE B

QUESTION 4.2

COMPARISON OF THE FIVE BEST-SELLING VEHICLES IN SOUTH AFRICA, AMERICA AND CANADA FOR 2021

SOUTH AFRICA	AMERICA	CANADA
 <p> ■ Toyota RAV4 ■ VW Polo Vivo ■ Ford Ranger ■ VW Polo □ Isuzu D-Max </p>	 <p> ■ Ford F-series □ Ram Pickup ■ Chev Silverado ■ Toyota RAV4 ■ Honda CR-V </p>	 <p> ■ Ford F-series □ Ram Pickup ■ Toyota RAV4 ■ GMC Sierra ■ Chev Silverado </p>
<p>TOTAL NUMBER OF VEHICLES SOLD = 111 710</p>	<p>TOTAL NUMBER OF VEHICLES SOLD = 2 584 176</p>	<p>TOTAL NUMBER OF VEHICLES SOLD = 357 243</p>

[Adapted from www.driving.ca, www.forbes.com and www.businesslive.co.za]





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GRADE/GRAAD 12

MATHEMATICAL LITERACY P1/
WISKUNDIGE GELETTERDHEID V1


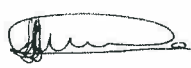

NOVEMBER 2022

MARKING GUIDELINES/NASIENRIGLYNE

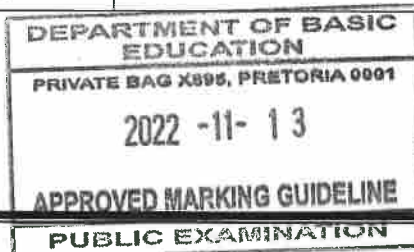
MARKS/PUNTE: 150

Symbol/Kode	Explanation/Verduideliking
M	Method/Metode
MA	Method with accuracy/Metode met akkuraatheid
MCA	Method with consistent accuracy/Metode met volgehoue akkuraatheid
CA	Consistent accuracy/Volgehoue akkuraatheid
A	Accuracy/Akkuraatheid
C	Conversion/Herleiding
S	Simplification/Vereenvoudiging
RT	Reading from a table/graph/document/diagram/Lees vanaf tabel/grafiek/dokument/diagram
SF	Correct substitution in a formula/Korrekte vervanging in 'n formule
O	Opinion/Explanation/Opinie/Verduideliking
P	Penalty, e.g. for no units, incorrect rounding off, etc./Penalisasie, bv. vir geen eenhede, verkeerde afronding, ens.
NPR	No penalty for correct rounding/Geen penalisasie vir korrekte afronding nie
NPU	No penalty for omitting unit, but wrong unit is penalised/Geen penalisasie indien die eenheid uitgelos is, maar wel indien 'n verkeerde eenheid gebruik word.
AO	Answer only/Slegs antwoord

These marking guidelines consist of 20 pages and 2 pages of notes.
Hierdie nasienriglyne bestaan uit 20 bladsye en 2 bladsye met notas.

APPROVED ON 13 November 2022	External Moderators (Question Paper)		Internal Moderator (Question Paper)
	R.I. Singh 	M.M. Tshabalala 	L.R. de Waal 

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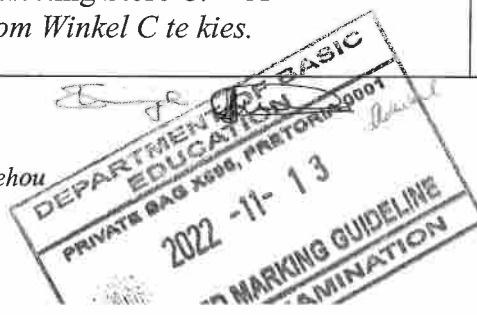
NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out (cancelled) an attempt to a question and NOT redone the solution, mark the crossed out (cancelled) version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guidelines; however it stops at the second calculation error.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- General principle of marking, if the candidate makes one mistake he loses one mark.
- A conclusion mark can only be given if relevant calculations precedes it.

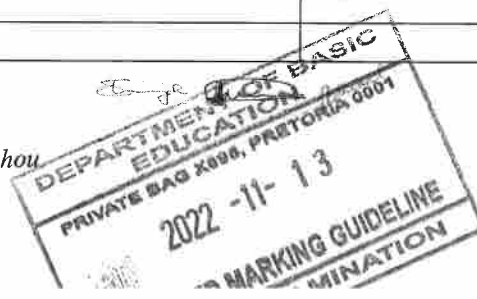
LET WEL:

- As 'n kandidaat 'n vraag TWEE KEER beantwoord, sien slegs die EERSTE poging na.
- As 'n kandidaat 'n antwoord van 'n vraag doodtrek (kanselleer) en nie oordoen nie, sien die doodgetrekte (gekanselleerde) poging na.
- Volgehoue akkuraatheid (CA) word in ALLE aspekte van die nasienriglyne toegepas; dit hou egter op by die tweede berekeningsfout.
- Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem en ekstra antwoorde gee, penaliseer vir elke ekstra item.
- Afronding tel as 'n afsonderlike punt.
- Die algemene beginsel van merk as 'n leerder een fout maak verloor hy een punt.
- 'n Gevolgtrekkingspunt kan slegs gegee word indien relevante berekeninge dit voorgaan.

QUESTION/VRAAG 1 [30 MARKS/PUNTE] ANSWER ONLY FULL MARKS			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.1	Numerical / Numeriese ✓✓A	2A correct classification (2)	D L1 E
* 1.1.2	✓RT R11,99; R18,99; R39,99; R44,99; R54,99; R159,99 ; R169,99 ✓A	1RT all correct values 1A ascending order (2)	D L1 E
* 1.1.3	B ✓✓RT	2RT correct store (2)	D L1 E
* 1.1.4	White socks/Wit kouse = $\frac{R85,99}{5}$ ✓MA = R17,198 ✓A = R17,20 ✓R	1MA dividing by 5 1A price per pair 1R 2 decimal places (3)	F L1 E
1.1.5	Total cost / Totale koste ✓RT P = R110,00 + R163,00 + R186,00 + R40,50 + R85,00 + R349,00 + R318,00 = R1 251,50 ✓A	1RT correct values 1A simplification (2)	F L1 E
1.1.6 (a)	✓A The chance/likelihood of selecting Store C. ✓A Die kans/waarskynlikheid om Winkel C te kies.	1A chance/likelihood 1A store C (2)	P L1 E



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.6 (b)	$0,3333333333 \times 100\% \checkmark\text{MA}$ $= 33,33333333\%$ $= 33\% \checkmark\text{A}$	1MA calculating percentage 1A rounded percentage (2)	P L1 E
* 1.2.1	$\checkmark\text{A}$ An investment is any form of saving that you put into a financial scheme, bank or stokvel that will result in interest. $\checkmark\text{A}$ <i>'n Belegging is 'n vorm van spaar waar jy geld in 'n finansiële skema, bank of stokvel sit wat sal lei na rente.</i>	1A form of savings 1A interest (2)	F L1 E
1.2.2	Total contributions/Totale bydrae $\text{R}2\,500 \times 24 \checkmark\text{MA}$ $= \text{R}60\,000 \checkmark\text{A}$	1MA multiply by months 1A simplification (2)	F L1 E
* 1.2.3	Interest earned/Rente verdien $\checkmark\text{MA}$ $\text{R}92\,065,71 - \text{R}60\,000$ $= \text{R}32\,065,71 \checkmark\text{A}$	1MA subtract correct values 1A simplification (2)	F L1 E
* 1.2.4	More interest/Meer rente $\checkmark\text{MA}$ $\text{R}92\,065,71 - \text{R}74\,286,84$ $= \text{R}17\,778,87 \checkmark\text{A}$	1MA subtracting correct values 1A simplification (2)	F L1 E
1.3.1	$\checkmark\text{A}$ Compound / Triple / Grouped / Multiple / Clustered bar graph $\checkmark\text{A}$ <i>Saamgestelde/ Drievoudige/ Gegroepeerde / Veelvoudige staafgrafiek</i>	1A type 1A bar graph (2)	D L1 E
1.3.2	95 ULP / Unleaded petrol / ULP / 95 $\checkmark\checkmark\text{A}$ 95 ULP / Loodvrye petrol / ULP / 95	2A correct product (2)	D L1 M
* 1.3.3	In rand /In rand $1\,955,28 \text{ c}/\ell \div 100 \checkmark\text{MA}$ $= \text{R}19,55/\ell \checkmark\text{A}$ $= \text{R}19,50/\ell \checkmark\text{R}$	1MA dividing by 100 1A rand per litre 1R rounding (3)	F L1 M
		[30]	



QUESTION/VRAAG 2 [34 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.1	Policy number / <i>Polisnommer</i> = 23388350 ✓✓RT	2RT correct number (2)	F L1 E
* 2.1.2	<p>Table values excluding A and discount / <i>Tabel waardes uitsluitend A en die afslag</i></p> <p>$R7,16 + R200,41 + R520,41 + R133,16 + R201,79 + R23,30 + R9,07$ ✓MA $= R1\ 095,30$</p> <p>Value of A / <i>Waarde van A</i></p> <p>✓MCA $R2\ 184,21 - R1\ 095,30 + R266,15$ ✓MA $= R1\ 355,06$ ✓CA</p> <p style="text-align: center;">OR/OF</p> <p>✓MA $R1\ 095,30 + A + (-R266,15) = R2\ 184,21$ ✓MA ✓MCA $A = R2\ 184,21 + R266,15 - R1\ 095,30$ $= R1\ 355,06$ ✓CA</p> <p style="text-align: center;">OR/OF</p> <p>Table values – A = / <i>Tabel waarde – A =</i> ✓MA $(R7,16 + R200,41 + R520,41 + R133,16 + R201,79 + R23,30 + R9,07) - R266,15$ ✓MA $= R829,15$</p> <p>$A = R2\ 184,21 - R829,15$ ✓MCA $= R1\ 355,06$ ✓CA</p>	<p>1MA adding all premiums</p> <p>1MCA subtracting from total premium 1MA adding the discount 1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA adding all premiums 1MCA subtracting from total premium 1MA adding the discount 1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA adding all premiums 1MA subtracting the discount 1MCA subtracting from total premium 1CA simplification</p> <p style="text-align: right;">(4)</p>	F L3 D
2.1.3	<p>Percentage discount / <i>Persentasie afslag</i></p> <p>✓RT $\frac{R266,15}{R2\ 450,36} \times 100\%$ ✓MA $= 10,86\%$ ✓CA</p>	<p>1RT correct amount 1MA correct %-calculation</p> <p>1CA simplification</p>	F L3 M

Bojje *du* *Adelstand*



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.3	<p style="text-align: center;">OR/OF</p> <p style="text-align: center;">✓RT</p> $\% \text{ discount} = \frac{R2\,450,36 - R2\,184,21}{R\,2\,450,36} \times 100\% \quad \checkmark \text{MA}$ $= 10,86\% \quad \checkmark \text{CA}$ <p style="text-align: center;">OR/OF ✓RT</p> $\text{Percentage discount} = 100\% - \left(\frac{R2\,184,21}{R2\,450,36} \times 100\% \right)$ $= 100\% - 89,14\% \quad \checkmark \text{MA}$ $= 10,86\% \quad \checkmark \text{CA}$	<p style="text-align: center;">OR/OF</p> <p>1RT correct amount 1MA correct %-calculation</p> <p>1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1RT correct amount 1MA correct %-calculation 1CA simplification NPR</p> <p style="text-align: right;">(3)</p>	
2.1.4	<p>Claim amount / <i>Eisbedrag</i></p> <p style="text-align: center;">✓RT</p> $R43\,520 - R7\,000$ $= R36\,520 \quad \checkmark \text{A}$	<p>1RT identifying R7 000</p> <p>1A claim amount</p> <p style="text-align: right;">(2)</p>	F L1 M
2.1.5	<p>Amount VAT / <i>BTW-bedrag</i></p> <p>✓A</p> $\frac{15}{115} \times \frac{R2\,184,21}{1}$ <p style="text-align: center;">✓MA</p> $= R284,90 \quad \checkmark \text{A}$ <p style="text-align: center;">OR/OF</p> $\text{Amount before VAT} = \frac{R2\,184,21}{1,15} \quad \checkmark \text{MA}$ $= R1\,899,31 \quad \checkmark \text{A}$ $\text{VAT amount} = R2\,184,21 - R1\,899,31$ $= R284,90 \quad \checkmark \text{A}$	<p>1A correct VAT calculation</p> <p>1MA multiplying by $\frac{15}{115}$</p> <p>1A simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA dividing by 1,15</p> <p>1A VAT excluded amount</p> <p>1A simplification</p> <p style="text-align: right;">(3)</p>	F L2 M

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Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
2.1.6	<p>The VW Polo costs more than the Toyota Corolla. / Die VW Polo is duurder as die Toyota Corolla. ✓✓O</p> <p style="text-align: center;">OR/OF</p> <p>The Toyota is an older model. / Die Toyota is 'n ouer model. (The VW is a newer model. / Die VW is 'n nuuter model). ✓✓O</p> <p style="text-align: center;">OR/OF</p> <p>The retail value of the VW Polo is higher, therefore replacement value is higher. / Die herverkoopwaarde van die VW Polo is hoër, daarom is die vervangingswaarde duurder. ✓✓O</p> <p style="text-align: center;">OR/OF</p> <p>The VW is a high risk vehicle. / Die VW is 'n hoë risiko voertuig. ✓✓O</p> <p style="text-align: center;">OR/OF</p> <p>The primary driver of the VW is a younger driver who is inexperienced as a driver. Die primêre bestuurder van die VW is 'n jonger bestuurder wat 'n onervare bestuurder is. ✓✓O</p>	<p>2O correct explanation</p> <p style="text-align: right;">(2)</p>	<p>F L4 M</p>
* 2.1.7	<p>His premium will increase as his household content value will increase to more than R200 000. / Sy premie sal verhoog aangesien sy huishoudelike inhoudswaarde gevolglik na meer as R200 000 sal verhoog. ✓✓O</p>	<p>2O valid conclusion</p> <p style="text-align: right;">(2)</p>	<p>F L4 M</p>
2.2.1	<p>Cost of sanitation / Koste van sanitasie</p> <p>= R228,06 ✓RT = R228,10 ✓R</p>	<p>AO</p> <p>1RT correct amount 1R correct rounding</p> <p style="text-align: right;">(2)</p>	<p>F L2 M</p>
* 2.2.2	<p>Tariff before increase / Tarief voor verhoging ✓RT R16,03 – R0,66 = R15,37 ✓A</p> <p>Cost of sanitation / Koste vir sanitasie</p> <p>4,1 kℓ × R15,37 ✓MCA = R63,02 ✓CA</p>	<p>1RT reading from table</p> <p>1A simplification</p> <p>1MCA multiply by tariff 1CA simplification</p>	<p>F L3 M</p>

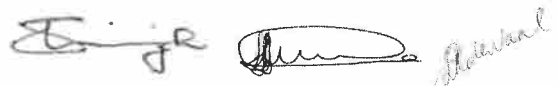


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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.2.2	<p style="text-align: center;">OR/OF</p> <p>Amount after increase / <i>Bedrag na verhoging</i> $= R16,03 \times 4,1 \text{ k}\ell$ $= R65,723 \checkmark A$</p> <p>Increase / <i>Verhoging</i> $\checkmark RT$ $= R0,66 \times 4,1 \text{ k}\ell$ $= R2,706$</p> <p>Amount before increase / <i>Bedrag voor verhoging</i> $= R65,723 - R2,706 \checkmark MCA$ $= R63,02 \checkmark CA$</p>	<p style="text-align: center;">OR/OF</p> <p>1A simplification</p> <p>1RT reading from table</p> <p>1MCA multiply by tariff 1CA simplification</p> <p style="text-align: right;">(4)</p>	
2.2.3	<p>Sanitation Bill – Cape Town: Ms Brown <i>Sanitasierekening – Kaapstad: Me Brown</i> $\checkmark MA \quad \checkmark RT$ $4,2 \text{ k}\ell \times R16,03 = R 67,33$ $3,15 \text{ k}\ell \times R22,02 = R 69,36$ $14,65 \text{ k}\ell \times R30,92 = R452,98$ $= R589,67 \checkmark CA$</p> <p>Sanitation Bill – Johannesburg: Mr Jones <i>Sanitasierekening – Johannesburg: Mnr Jones</i></p> <p>VAT / BTW: $\checkmark RT$ $= R443,96 \times \frac{15}{100}$ $= R66,59$</p> <p>Total amount / Totale bedrag $= R443,96 + R66,59 \checkmark MCA$ $= R510,55 \checkmark CA$</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> $= R443,96 \times \frac{115}{100}$ </div> <p>Difference in Sanitation Bill / <i>Verskil in Sanitasierekening</i> $R589,67 - R510,55 \checkmark MCA$ $= R79,12 \checkmark CA$</p>	<p>1MA all (3) correct kℓ 1RT 3 tariffs</p> <p>1CA finding total water bill</p> <p>1RT correct amount</p> <p>1MCA adding values 1CA simplification</p> <p>1MCA subtracting values 1CA simplification</p> <p style="text-align: right;">(8)</p>	<p>F L3 D</p>



Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
* 2.2.4	<p>The fixed rate allows you to use as much as you can for the same amount. / <i>Die vaste koers laat jou toe om soveel as wat jy kan vir dieselfde bedrag te gebruik.</i> ✓✓○</p> <p style="text-align: center;">OR/OF</p> <p>It benefits home owners with smaller properties who pay less. / <i>Dit bevoordeel eienaars van kleiner huise wat minder gaan betaal.</i> ✓✓○</p> <p style="text-align: center;">OR/OF</p> <p>Even if the usage of water varies /differs from month to month, the cost/bill remains the same amount. / <i>Selfs as die water gebruik verskil van maand tot maand bly die koste/rekening dieselfde.</i> ✓✓○</p>	<p>20 correct explanation</p> <p style="text-align: right;">(2)</p>	F L4 M
		[34]	





QUESTION/VRAAG 3 [24 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.1.1	Total value / <i>Totale waarde</i> \checkmark RT $= 18,4 + 5,6 + 0,5 + 2,9 + 9,5 + 3,1 + 33,1 + 5,7 + 4,7$ \checkmark MA $= 83,5$ OR/OF Total value / <i>Totale waarde</i> \checkmark RT $= 1\ 199,5 - 1\ 116$ \checkmark MA $= 83,5$	1RT correct values 1MA adding OR/OF 1RT both correct values 1MA subtracting (2)	D L1 E
3.1.2	The table value is given in ten thousands. $\checkmark\checkmark$ O <i>Die tabelwaarde is gegee in tien duisende.</i> OR/OF Rounding issues / <i>Probleme met afronding</i> $\checkmark\checkmark$ O	2O difference in table value from actual value OR/OF 2O rounding (2)	D L4 M
3.1.3	Number of people / <i>aantal mense</i> \checkmark RT $= 365,9 \times 10\ 000$ $= 3\ 659\ 000$ OR/OF 365,9 ten thousand / <i>tien duisend</i> \checkmark A	1RT reading from table 1A correct value (2)	D L1 E
3.1.4	Medical sector e.g. doctor/ nurse Security sector e.g. police / security guards Essential services e.g. cashier Construction sector e.g. plumbing / electrician / builder Agricultural sector e.g. farming <i>Mediese sektor bv. dokter / verpleegster</i> $\checkmark\checkmark$ A <i>Sekuriteit sektor bv. polisie / sekuriteitswag</i> <i>Essensiële dienste bv. kasier</i> <i>Konstruksie sektor bv. loodgieter / elektrisiën / bouer</i> <i>Landbou sektor bv. boerdery</i>	2A correct job (2)	D L1 E



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
* 3.1.5	Mean in ten thousand / <i>Gemiddeld in tien duisend</i> $\begin{aligned} & \checkmark\text{RT} \\ & = \frac{21,7 + 7,2 + 0,5 + 3,2 + 9,4 + 2,4 + 36,6 + 5,8 + 6,3}{9} \\ & = \frac{93,1}{9} \checkmark\text{S} \\ & = 10,34444 \end{aligned}$ $\frac{1168,1 - 1075}{9} \checkmark\text{MA}$ Mean = 103 444,4 OR/OF 103 444 $\checkmark\text{CA}$	1RT adding correct values 1MA concept of mean 1S simplification 1CA correct mean NPR (4)	D L2 M
* 3.2.1	Quarter / <i>Kwartaal 3</i> 3 rd / <i>3de</i> Third / <i>Derde</i> $\checkmark\checkmark\text{RT}$	2RT correct quarter (2)	D L1 E
3.2.2	Number of unemployed / <i>Aantal werkloos</i> $\begin{aligned} & \checkmark\text{RT} \\ & 7,6 \text{ million} + 183\ 000 \\ & \checkmark\text{C} \\ & 7\ 600\ 000 + 183\ 000 \\ & = 7\ 783\ 000 \checkmark\text{CA} \end{aligned}$ $\begin{aligned} & \checkmark\text{RT} \\ & 7,6 \text{ million} + 0,183 \text{ million} \checkmark\text{C} \\ & = 7,783 \text{ million} / \text{miljoen} \checkmark\text{CA} \end{aligned}$ OR/OF	1RT correct values 1C correct conversion 1CA simplification $\checkmark\checkmark\text{RT}$ 1RT correct values 1C correct conversion 1CA simplification (3)	D L2 M

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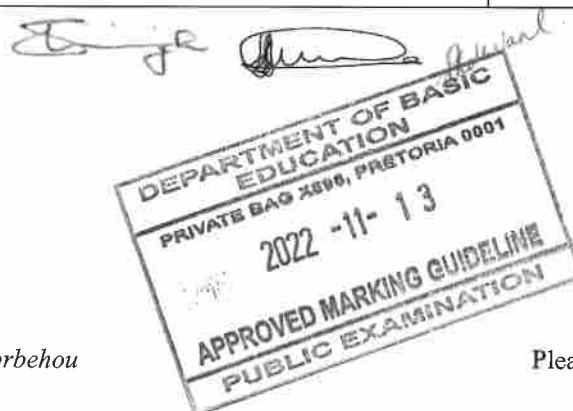


Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.2.3	\checkmark RT \checkmark RT $Q1 = 34\%$; $Q3 = 37,4\%$ Increase % / Toename % $= 37,4\% - 34\%$ $= 3,4\%$ \checkmark CA	1RT quarter 1 1RT quarter 3 Accept quarter 3: $37,3\% - 37,5\%$ 1CA increase Accept: $3,3\% - 3,5\%$	D L2 M
		(3)	
3.2.4	Total number of people / <i>Totale aantal mense</i> $\frac{100}{34,4} \times 7,6 \text{ million}$ \checkmark RT $= 22\ 093\ 023,26$ $= 22\ 093\ 023$ \checkmark A \checkmark MCA Number of employed people = $22\ 093\ 023 - 7\ 600\ 000$ $= 14\ 493\ 023$ \checkmark CA OR/OF \checkmark RT Employed = $100\% - 34,4\% = 65,6\%$ \checkmark A \checkmark MCA Number of employed people = $\frac{65,6}{34,4} \times 7\ 600\ 000$ $= 14\ 493\ 023$ \checkmark CA	1RT correct percentage 1A simplification 1MCA subtracting values 1CA total number of people OR/OF 1RT correct percentage 1A simplification 1MCA ratio calculation 1CA total number of people NPR	D L2 M
		(4)	
		[24]	

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QUESTION/VRAAG 4 [33 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.1.1	Tax Payable (before rebates) $= R115\ 762 + [36\% \times (\text{annual taxable income} - 488\ 700)]$ <i>Belasting betaalbaar (voor korting)</i> $= R115\ 762 + [36\% \times (\text{jaarlikse belasbare inkomste} - 488\ 700)]$ ✓SF Tax payable $= R115\ 762 + [\frac{36}{100} \times (495\ 602 - 488\ 700)]$ $= R115\ 762 + 2\ 484,72$ ✓MA $= R118\ 246,72$ ✓CA	AO 1SF substituting value 1MA adding values 1CA simplification NPR (3)	F L2 E
* 4.1.2	Monthly tax (before rebate) / <i>Maandelikse belasting (voor belastingkorting)</i> $= R118\ 246,72 \div 12$ ✓MA $= R9\ 853,89$ ✓A After rebate / <i>Na belastingkorting</i> $= R9\ 853,89 - R1\ 368,75$ ✓MA $= R8\ 485,14$ ✓MCA Monthly taxable income (before rebate) / <i>Maandelikse belasting (voor belastingkorting)</i> $= R495\ 602 \div 12$ $= R41\ 300,17$ ✓A Tax payable (according to table) / <i>Belasting (volgens tabel)</i> $= R8\ 491$ He is incorrect / <i>Hy is verkeerd</i> ✓O <p style="text-align: center;">OR/OF</p>	CA from Question 4.1.1 1MA dividing by 12 1A monthly tax 1MA subtracting rebate 1MCA finding tax after rebate 1A monthly income 1O conclusion <p style="text-align: center;">OR/OF</p>	F L4 D



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.1.2	<p>Annual rebate / <i>Jaarlikse korting</i></p> <p>= R1 368,75 × 12 ✓MA = R16 425 ✓A</p> <p>Annual tax (after rebate) / <i>Jaarlikse belasting (na belastingkorting)</i></p> <p>= R118 246,72 – R16 425 = R101 821,72 ✓A</p> <p>Monthly income / <i>Maandelikse inkomste</i></p> <p>= R495 602 ÷ 12 = R41 300,17 ✓A</p> <p>Annual tax / <i>Jaarlikse belasting</i></p> <p>= R8 491 × 12 = R101 892 ✓MCA</p> <p>He is incorrect / <i>Hy is verkeerd.</i> ✓O</p> <p style="text-align: center;">OR/OF</p> <p>Monthly tax before rebate / <i>Maandelikse belasting voor korting</i></p> <p>= R118 246,72 ÷ 12 ✓MA = R9 853,89 ✓A</p> <p>Monthly taxable income / <i>Maandelikse belasbare inkomste</i></p> <p>= R495 602 ÷ 12 = R41 300,17 ✓A</p> <p>Before rebate / <i>Voor korting</i></p> <p>= R8 491 + R1 368,75 ✓MA = R9 859,75 ✓MCA</p> <p>He is incorrect / <i>Hy is verkeerd.</i> ✓O</p>	<p>1MA multiplying by 12 1A correct annual rebate</p> <p>1A annual tax</p> <p>1A monthly income</p> <p>1MCA annual tax</p> <p>1O conclusion</p> <p style="text-align: center;">OR/OF</p> <p>1MA dividing by 12 1A correct answer</p> <p>1A correct answer</p> <p>1MA adding rebate 1MCA finding tax after rebate</p> <p>1O conclusion</p>	<p>F L4 D</p> <p style="text-align: right;">(6)</p>

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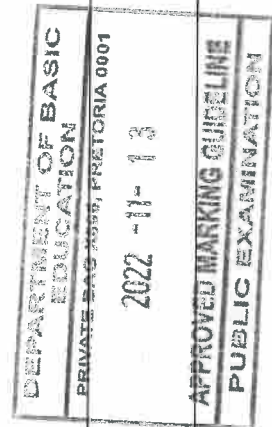


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.1.3	Probability / <i>waarskynlikheid</i> 0 ; 0% ; impossible / <i>onmoontlik</i> / zero / <i>nul</i> ✓✓A	2A probability (2)	P L2 M
4.2.1	Two million five hundred and eighty four thousand one hundred and seventy six. <i>Twee miljoen vyf honderd vier en tagtig duisend een honderd ses en sewentig.</i> ✓✓A	2A correct words (2)	D L1 E
* 4.2.2	✓RT 407 739 : 61 934 : 36 085 ✓MA	1RT correct values 1MA correct order (2)	D L2 M
* 4.2.3	16 426; 18 235; 19 077; 21 887; 36 085 ✓A Median / <i>mediaan</i> = 19 077 ✓A	AO 1A arranging values 1A correct median (2)	D L2 E

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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.2.4	Number of Ford F-Series / <i>Aantal Ford F-Reeks</i> $= 357\,243 - (53\,757 + 51\,684 + 73\,467 + 61\,934)$ $= 357\,243 - 240\,842$ $= 116\,401 \checkmark CA$	AO 1RT correct values from graph 1MA subtracting from total 1CA simplification (3)	D L2 E
* 4.2.5	Interquartile range / <i>Interkwartielomvang</i> $IQR = Q3 - Q1$ $7\,669 = Q3 - 11\,408$ $Q3 = 7\,669 + 11\,408$ $= 19\,077 \checkmark CA$	AO 1A correct formula 1SF substituting into formula 1MA changing the subject of the formula 1CA simplification (4)	D L3 M
4.2.6	2020 Price of Ford F-Series / <i>2020 prys van Ford F-reeks</i> $= \$32\,332 \times \frac{100}{107}$ $= \$30\,216,82 \checkmark A$ 2019 Price of Ford F-Series / <i>2019 prys van Ford F-reeks</i> $= \$30\,216,82 \times \frac{100}{101,4}$ $= \$29\,799,63 \checkmark CA$ The statement is not valid / <i>Die bewering is nie geldig nie.</i> ✓O OR/OF 2019 Price of Ford F-Series / <i>2019 prys van Ford F-reeks</i> $= \$32\,332 \times \frac{100}{101,4}$ $= \$29\,799,63 \checkmark CA$ The statement is not valid / <i>Die bewering is nie geldig nie.</i> ✓O	1RT numerator 1RT denominator 1A 2020 price 1MA concept of % decrease 1CA simplification 1O not valid OR/OF 1RT numerator 1RT denominator 1RT numerator 1RT denominator 1CA simplification 1O not valid (6)	F L4 D



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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.2.7	Probability / Waarskynlikheid $\frac{\checkmark RT}{2\ 584\ 176} \times 100\%$ $= 22,03\% \checkmark CA$	1RT correct numerator 1RT correct denominator 1CA simplification NPR	P L2 M (3)
			[33]

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Out of 27	Out of 33
1	1
2	2
3	4
4	5
5	6
6	7
7	9
8	10
9	11
10	12
11	13
12	15
13	16
14	17

Out of 27	Out of 33
15	18
16	20
17	21
18	22
19	23
20	24
21	26
22	27
23	28
24	29
25	31
26	32
27	33



QUESTION/VRAAG 5 [29 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.1.1	Western Cape / <i>Wes-Kaap</i> ✓✓RT	2RT correct province (2)	D2 L2
* 5.1.2	\checkmark RT $3\% + 4\% + 4\%$ $= 11\%$ ✓A $= \frac{4}{11} \times R8\,300\,000\,000$ ✓MCA $= R3\,018\,181\,818 / R3,018181818 \text{ billion} / \text{miljard}$ ✓CA <p style="text-align: center;">OR/OF</p> Total contribution / <i>Totale bydrae</i> \checkmark RT $= \frac{100}{11} \times R8\,300\,000\,000$ $= R75\,454\,545\,454$ ✓A WC contribution / <i>WK bydrae</i> $= \frac{4}{100} \times R75\,454\,545\,454$ ✓MCA $= R3\,018\,181\,818$ ✓CA	1RT all 3 values 1A simplification 1MCA calculating ratio 1CA simplification <p style="text-align: center;">OR/OF</p> 1RT correct values 1A simplification 1MCA calculating ratio 1CA simplification NPR (4)	F L3
5.1.3	Transport / <i>Vervoer</i> ✓✓RT	2RT correct sector (2)	D2 L2
5.1.4	Finance / <i>Finansies</i> ✓✓RT	2RT correct sector (2)	D2 L3
5.1.5	Western Cape / <i>Wes-Kaap</i> ✓✓RT	2RT correct province (2)	D2 L2
5.2.1	Japanese yen / <i>Japanese yen</i> ✓✓RT	2RT correct currency (2)	F L1 M
5.2.2	Russian Rouble = $\frac{1}{6,97481}$ ✓A $= 0,143373$ ✓A	1A numerator 1A denominator (2)	F L1 E



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.2.3	$\begin{aligned} & \checkmark A \\ & = \frac{R1\ 230\ 000}{R1} \times CAD\ 0,084845 \checkmark MA \\ & = CAD\ 104\ 359,35 \checkmark A \end{aligned}$ <p style="text-align: center;">OR/OF</p> $\begin{aligned} & \checkmark A \\ & = \frac{R1\ 230\ 000}{R11,785} \times CAD1 \checkmark MA \\ & = CAD\ 104\ 369,9618 \\ & = CAD\ 104\ 369,96 \checkmark A \end{aligned}$	<p>1A correct exchange rate 1MA multiply with exchange rate 1A simplification</p> <p style="text-align: center;">OR/OF</p> <p>1A correct exchange rate 1MA dividing by exchange rate 1A simplification NPR</p> <p style="text-align: right;">(3)</p>	F L3 D
5.2.4	<p>Diversify his income / <i>Diversifiseer sy inkomste.</i> $\checkmark\checkmark O$</p> <p style="text-align: center;">OR/OF</p> <p>The Canadian currency is stronger / <i>Die Kanadese geldeenheid is sterker as die rand.</i> $\checkmark\checkmark O$</p> <p style="text-align: center;">OR/OF</p> <p>He will get a better return on his investment / <i>Hy sal 'n beter opbrengs kry op sy belegging.</i> $\checkmark\checkmark O$</p>	<p>2O reason</p> <p style="text-align: right;">(2)</p>	F L4 M

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Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
5.2.5	<p>Amount interest / <i>Bedrag rente</i></p> <p>Year / <i>jaar 1</i></p> $R1\ 230\ 000 \times \frac{8,1}{100} \quad \checkmark\text{MA}$ $= R99\ 630 \quad \checkmark\text{A}$ <p>Total after year 1 / <i>Totaal na jaar 1</i></p> $R1\ 230\ 000 + R99\ 630$ $= R1\ 329\ 630 \quad \checkmark\text{A}$ <p>Year / <i>jaar 2</i></p> $R1\ 329\ 630 \times \frac{8,1}{100}$ $= R107\ 700,03$ <p>Total after year 2 / <i>Totaal na jaar 2</i></p> $R1\ 329\ 630 + R107\ 700,03$ $= R1\ 437\ 330,03 \quad \checkmark\text{CA}$ <p>8 months / <i>maande</i></p> $R1\ 437\ 330,03 \times \frac{8,1}{100} \times \frac{8}{12} \quad \checkmark\text{MA}$ $= R77\ 615,82162$ <p>Final amount / <i>Finale bedrag</i></p> $= R1\ 437\ 330,03 + R77\ 615,82162$ $= R1\ 514\ 945,852 \quad \checkmark\text{CA}$ $R1\ 529\ 360 - R1\ 514\ 945,852$ $= R14\ 414,15 \quad \checkmark\text{CA}$ <p>His statement is valid. / <i>Sy bewering is geldig.</i> $\checkmark\text{O}$</p>	<p>MA calculating 8,1%</p> <p>1A interest year 1</p> <p>1A amount end year 1</p> <p>1CA amount year 2</p> <p>1MA calculating 8 months</p> <p>1CA final amount</p> <p>1CA difference</p> <p>1O conclusion</p>	<p>F</p> <p>L4</p> <p>D</p>

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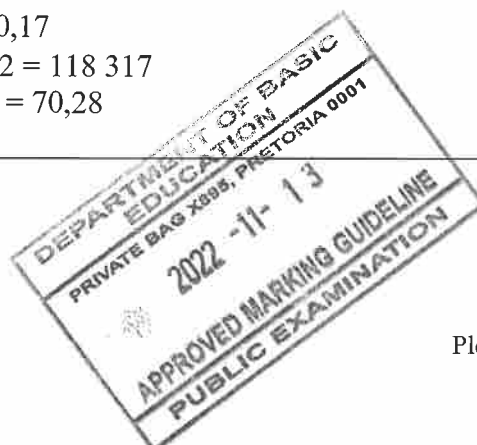


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
	OR/OF	OR/OF	
5.2.5	Total year 1 / <i>Totaal jaar 1</i> $\checkmark A$ $R1\ 230\ 000 \times 1,081 \checkmark MCA$ $= R1\ 329\ 630 \checkmark A$ Total year 2 / <i>Totaal jaar 2</i> $R1\ 329\ 639 \times 1,081$ $= R14\ 373\ 30,03 \checkmark CA$ Interest rate for 8 months / <i>Rentekoers vir 8 maande</i> $8,1\% \times 8 \div 12$ $= 5,4\% \checkmark A$ Total after 2 years 8 months / <i>Totaal na 2 jaar en 8 maande</i> $R1\ 437\ 330,03 \times 1,054$ $= R151\ 4\ 945,85 \checkmark CA$ Difference in interest earned / <i>Verskil in rente verdien</i> $R1\ 529\ 360 - R1\ 514\ 945,85$ $= R14\ 414,15 \checkmark CA$ The statement is valid / <i>Bewering is geldig.</i> $\checkmark O$	1A calculating 1,081 1MCA multiplying with 1,081 1A amount end year 1 1CA amount end year 2 1A calculating 5,4% 1CA final amount 1CA difference 1O conclusion NPR	(8)
		[29]	
		TOTAL/TOTAAL: 150	

Boon  *Boon*



NOTES:		
1.1.2	Correct values arranged in wrong order	1/2 marks
	Skip a value and descending order	0 marks
1.1.3	Option B Second Store	Accept
	Answer of R39,99 – identifying the cheapest shorts.	1/2 marks
1.1.4	Grey socks instead of white Used wrong store or grey socks $R89,99 \div 3 = R30$ (2/3 marks) $R85,00 \div 5 = R17$ (2/3 marks)	2/3 marks
1.1.5	If multiplying e.g. $R110 \times 2$ – only 1 mark (RT mark)	1/2 marks
1.1.6 a	Accept 1 out of the 3 stores (instead of store C)	
	$\frac{1}{3}$ only	0 marks
1.1.6 b	33,3% = 1 mark	1/2 marks
1.2.1	Accept Interest = extra amount received NOT profit	
1.2.3	If Plan A instead of Plan B (R74 286,84 – R60 000,00)	1/2 marks
1.2.4	If learners worked interest for Plan A and for Plan B and compare – full marks	Full marks
1.3.3	If R19,60 OR R20,00 MUST show calculations for rounding.	2/3 marks
	Only R19,60 OR R20,00 – NO marks	0 marks
2.1.2	Accept: Total Premium excluding VAT = $\frac{100}{115} \times R2\ 184,21$ = R1 899,31 ✓A Total before VAT = R1 899,31 + R266,15 ✓MA = R2 165,46 Value of A = R2 165,46 – R1 095,30 ✓MCA = R1 070,16 ✓CA	4 marks
2.1.7	Accept: The new item will not be covered by insurance.	Full marks
2.2.2	Only: $4,1\ k\ell \times R16,03$ = R65,72 → not continued	3/4 marks
2.2.4	No matter how much water you are using, you still pay the same amount.	Full marks
3.1.5	Accept = 10,34444 OR 10,3 as the answer.	
3.2.1	Accept 3	Full marks
4.1.2	Accept: $495\ 602 \div 12 = 41\ 300,17$ $(8491 + 1\ 368,75) \times 12 = 118\ 317$ $118\ 317 - 118\ 246,72 = 70,28$ It is not correct.	Full marks



4.2.2	<p>11,3 : 1,72 : 1</p> <p>OR</p> <p>6,58 : 1 : 0,58</p> <p>OR</p> <p>1 : 0,15 : 0,089</p>	Full marks
4.2.3	If number and vehicle (Ford Ranger).	Full marks
	If vehicle only (Ford Ranger).	1/2 marks
4.2.5	<p>Only write:</p> <p>$Q3 = 7\ 669 + 11\ 408$</p> <p>$= 19\ 077$</p>	Full marks
4.2.6	Scaled mark in question.	
5.1.2	Accept 2% – 3% (between 10 and 11)	
	Only work out 4%.	2/4 marks
5.2.5	<p>If using the formula (must be 100% correct):</p> <p>$= R1\ 230\ 000 (1 + 8,1\%)^{2,67}$</p> <p>$= R1\ 513\ 934,068$</p> <p>$= R1\ 529\ 360 - R1\ 513\ 934,068$</p> <p>$= R15\ 425,932$</p>	Full marks
	<p style="text-align: center;">✓A ✓A ✓✓A</p> <p>$R1\ 230\ 000 \times 1,081 \times 1,081 \times 1,054$</p> <p>$= R1\ 514\ 945,852$ ✓CA</p> <p style="text-align: center;">✓MCA</p> <p>$= R1\ 529\ 360 - R1\ 514\ 945,852$</p> <p>$= R14\ 414,15$ ✓CA</p> <p>Statement is valid ✓O</p>	Full marks
	<p>Afrikaans = R14 000 meer:</p> <p>$= R14\ 414,15$</p> <p>Bewering is nie geldig nie.</p>	

