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PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

NATIONAL SENIOR CERTIFICATE

GRADE 12

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PROVINCIAL EXAMINATION

MATHEMATICAL LITERACY P1

SEPTEMBER 2026

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MARKS: 150

TIME: 3 hours

This question paper consists of 12 pages.

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INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions. Answer ALL the questions.
2. Read ALL the instructions carefully.
3. Use ANNEXURE A, on page 4 in the answer book, to answer QUESTION 2.1.
4. Use Table 2 on page 7 in the answer book to answer QUESTION 3.
5. Use ANNEXURE B on page 10 in the answer book to answer QUESTION 4.2.
6. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
7. Show ALL calculations clearly.
8. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
9. Indicate units of measurement, where applicable.
10. Maps and diagrams are NOT necessarily drawn to scale, unless stated otherwise.
11. For the purposes of answering this question paper, a VAT rate of 15% must be used where necessary.
12. Answer ALL questions on the answer book provided
13. Write neatly and legibly

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QUESTION 1

1.1 In TABLE 1 below is a list of explanations and definitions of concepts used in Mathematical Literacy.

TABLE 1: EXPLANATIONS AND DEFINITIONS OF CONCEPTS

A	Annual tax payable before rebates.
B	A special type of diagram is used to determine the outcomes of an event in a game.
C	The middlemost value in a data set arranged in ascending order.
D	Ordinary and necessary costs of running a small business.
E	The financial benefit realised when money generated from a business exceeds the expenses, costs, and taxes involved in keeping the business.
F	The process of using a research tool to gather information.
G	Chance of a particular outcome in a game of sport.
H	A tax relief given to a taxpayer.
I	The sum of the number of scores divided by the number of scores.
J	The difference between the maximum value and minimum value in a data set.
K	Chance of a particular outcome in a game of sport.

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Use the information above to write down the letter of the explanation or definition (A to K) of EACH of the following: Write only the letter next to the question numbers (**e.g. 1.1.6 M**)

1.1.1	Average	(2)
1.1.2	Tax rebate	(2)
1.1.3	Range	(2)
1.1.4	Survey	(2)
1.1.5	Median	(2)

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1.2 A gas cylinder and outdoor cooker are useful devices to provide an alternative energy source during camping.

Below is a picture of a set consisting of a gas cylinder and an outdoor cooker with different payment options.

TABLE 2

PAYMENT OPTIONS OF A GAS CYLINDER AND OUTDOOR COOKER SET

CASH PRICE R10 999 (including 15% VAT)	**HIRE-PURCHASE**	**ONLINE CREDIT**
	Deposit: 10% **Instalment:** R280,45 p.m. × 36 months Interest rate: 9,5%	**Instalment:** R965,50 p.m. × 12 months Interest rate: 9,76%

[Source: walmat.com]

Use the information above to answer the questions that follow.

1.2.1 Name the TWO most costly payment options for this gas cylinder and outdoor cooker set. (2)

1.2.2 Define hire-purchase within the given context. (2)

1.2.3 Write down the interest rate if the gas cylinder and outdoor cooker set were bought on hire-purchase. (2)

1.2.4 Calculate the total cost of the gas cylinder and outdoor cooker set, using online credit. (2)

1.2.5 A 12,5% discount is given on the cash price.
Calculate the amount of discount given if the gas cylinder and outdoor cooker set are purchased for cash. (2)

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1.2.6 Choose which ONE of the following A, B or C completes or explains the leading statement below the best.

Statement: '15% VAT is an indirect form of tax because it is….'

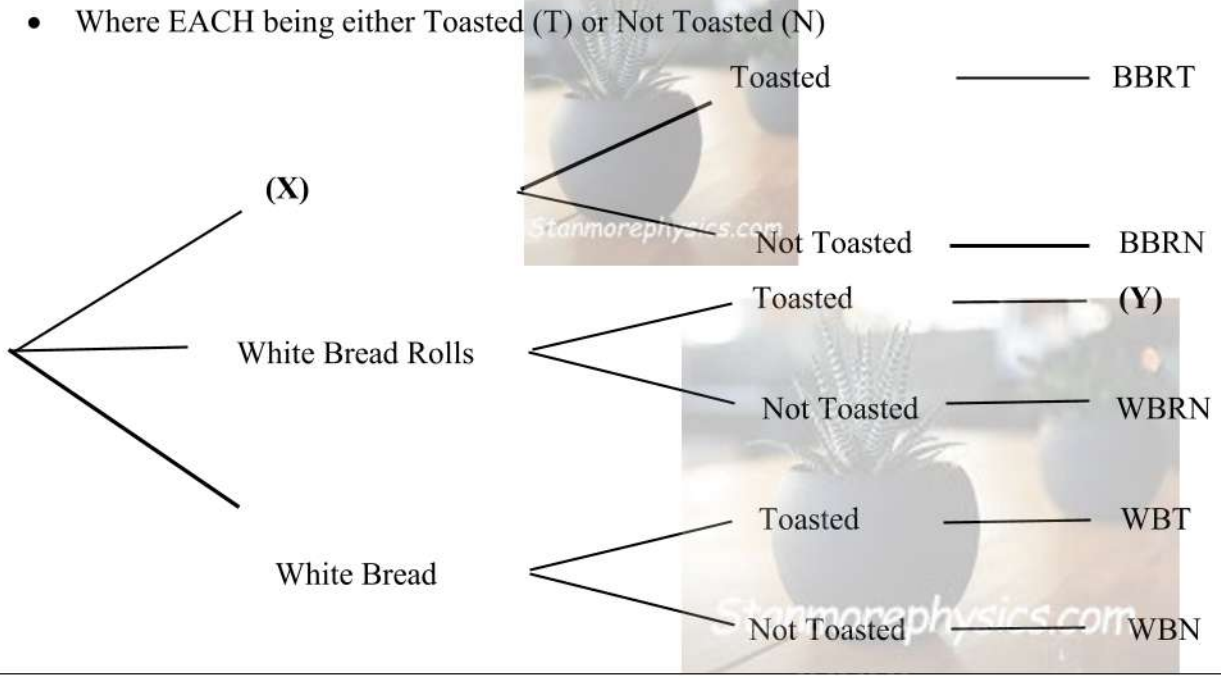
A. included in the cash price.

B. paid straight to the government.

C. collected by a retail store from the customer who pays the tax included in the price of purchased goods. The store later files a tax return and forwards the tax takings to the government. (2)

1.3 Bonginkosi's catering lunch pack has the following bread rolls (either white or brown) and white bread options to choose from

- White Bread Rolls (WBR)
- Brown Bread Rolls (BBR)
- White Bread (WB)
- Where EACH being either Toasted (T) or Not Toasted (N)



Use the information above to answer the questions that follow.

1.3.1 Identify the type of diagram illustrated above. (2)

1.3.2 Complete the missing labels **(X)** and **(Y).** (4)

1.3.3 Write down the total number of outcomes. (2)

[30]

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QUESTION 2

2.1 John is employed as a land surveyor at Church Hill Company in Durban. He earns a monthly salary of R21 000. He also receives a monthly allowance of R1 500 from his father for the odd jobs he does for him. A list of his income and expenses are shown on page 4 in the Answer book in **ANNEXURE A.**

Use **ANNEXURE A** and the information above to answer the questions that follow.

2.1.1. Calculate the missing value **P**, John's Total income, for March 2024 (2)

2.1.2. Determine the value of **Q,** expenses for car repayment. (3)

2.1.3. Calculate the value of **T** and indicate if it is a Surplus or Deficit. (3)

2.1.4 John stated that if he reduces his variable expenses by 25% his financial position will improve. Verify with calculations whether his claim is valid (5)

2.2

Church Hill Company intends to increase the salary by 12.5 % starting from 1 April 2024

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Calculate John's new total income for the month of April, if his monthly allowance remains the same. (5)

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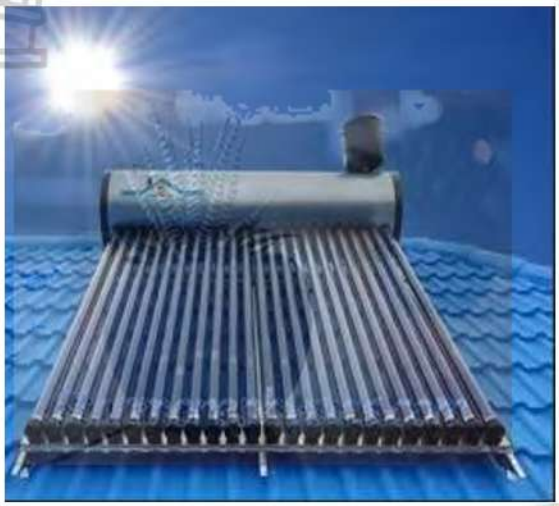
2.3 John uses an electric geyser for water heating. Due to the high cost of electricity he is considering installing a solar geyser.

He obtained the information below on the internet. All prices include 15% VAT and monthly payments are done for 48 months.

10% of the cash cost should be paid as a deposit before installation is done.



Solar Geyser Option	Cash Cost	Monthly payment
Builders 150 L × 2	R 25 400,00	R 638,00
Solarguru 300 L	R 24 548,25	R 619,00
Suntank 300 L	R 22 400,47	R 574,00
4 Solar 300 L conversion	R 17 900,00	R 477,00

[Adapted from the villagenews.co.za]

Use the information above to answer questions that follow.

2.3.1. Calculate the cost price of Solarguru 300L, excluding VAT. (3)

2.3.2. Determine the total amount that will be paid at Suntank if the monthly payment option is chosen. (5)

2.3.3. John indicated that the total interest paid, as a percentage of the cash price, will be less than 32% if he chooses the monthly payment option from Builders. Verify with calculations if his statement is valid.

You may use the following formula:

$$\textbf{Percentage interest} = \frac{\textbf{Total repayment} - \textbf{Cash price}}{\textbf{Cash price}} \times 100\%$$

(7)

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QUESTION 3

3	The 2025 NSC performance by type of passes per province is shown on Table 2 in the Answer book on page 7

Use the information in Table 2 to answer the questions that follow.

3.1 Show how the 89,00 % achieved in Gauteng Province was obtained (2)

3.2 Write down the name of a Province with the second highest percentage achieved in terms of bachelor passes performance. (2)

3.3 Determine the national range of the number of Higher Certificate passes for 2025 NSC. (3)

3.4 Lesiba claims that KwaZulu-Natal Province had less than 12 times the number of learners who wrote than Northern Cape Province in 2025 NSC. Show, by calculations, if his claim is valid. (4)

3.5 Determine the median number in terms of the number of learners who achieved Diploma passes. (3)

3.6 How many more learners must have passed for National pass rate to be at 90%. (5)

3.7 Which Province performed the best in terms of quality passes? Provide a possible reason for the Province of your choice (3)

3.8 Name the type of graph that was used to show the 2025 NSC performance type of passes. (2)

3.9 A graph on the Answer Sheet represent the 2025 NSC performance pass rate for type of passes of all the provinces in South Africa. Complete the graph for Eastern Cape (Diplomas) and Northern Cape (Bachelors) Provinces with missing bars (4)

[28]

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QUESTION 4

4.1 Caroline, 45 years of age, is a primary school teacher in North Carolina, USA. In 2020 due to COVID-19, her monthly salary was reduced by 12% to $4 235, US dollars,

Note: $ 1 = R 16,78

[Adapted from www. salary.com]

4.1.1 Calculate her initial salary in dollars before it was reduced. (3)

4.1.2 Calculate her annual salary in rands (4)

4.2 Caroline has now relocated to Cape Town, RSA. Her new employer agreed to maintain the same salary. She contributed 7,5% of her annual salary towards pension. She has also contributed a certain amount of money to the Medical Aid Scheme for herself, her husband and 3 children. Income tax brackets for 2020/2021 and 2021/2022 financial years are shown in ANNEXURE B on page 10 of the Answer book.

Use ANNEXURE B and the information above to answer questions that follow.

4.2.1 Calculate the amount she will contribute towards pension per year in rands. (2)

4.2.2 Explain how the tax rebates affects the amount of tax payable. (2)

4.2.3 Write down the general trend of the medical aid tax credits in ANNEXURE B. (2)

4.2.4 Calculate Caroline's annual tax payable for the 2020/2021 tax year. (6)

4.2.5 Caroline indicated that the annual tax payable for 2021/2022 will only increase by R 2000,00 from the 2020/2021 tax year. (7)
Verify showing ALL calculations whether her claim is valid.

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4.3 Caroline and her friend decided to make fashionable T-shirts and sell each at the profit margin of 25% to supplement their salaries. The cost price of making one T-shirt is R21,00. They intend to share the profit in the ratio of 3:2.

Use the information above to answer the questions that follow.

4.3.1 Calculate the selling price of each T-shirt. (3)

4.3.2 Calculate the profit of selling 40 T-shirts. (4)

4.3.3 Calculate the amount of profit each of them would receive. (4)

[37]

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QUESTION 5

Dr Zweli Mkhize, the Health Minister, wants to check the top 10 countries with the highest number of infections by COVID-19 in the world.

TABLE 3: TOP 10 COUNTRIES IMPACTED BY COVID-19 WORLDWIDE

COUNTRY	TOTAL INFECTION	ACTIVE CASES	RECOVERIES	DEATHS	RECOVERY RATE %	REGION
USA	31 496 976	6 869 132	24 058 562	569 282	76,4	**NORTH AMERICA**
BRAZIL	13 023 189	1253 847	11 436 189	333 153	87,8	**SOUTH AMERICA**
INDIA	12 686 049	788 193	11 732 279	165 577	92,5	**ASIA**
FRANCE	4 833 263	4 436 324	300 064	96 875	6,2	**EUROPE**
RUSSIA	4 589 540	277 690	4 211 133	100 717	91,8	**EUROPE**
UK	4 362 150	322 726	3 912 562	126 862	89,7	**EUROPE**
ITALY	3 678 944	570 096	2 997 522	111 326	81,5	**EUROPE**
TURKEY	3 529 601	366 168	3 130 977	32 456	**Z**	**ASIA**
SPAIN	3 311 329	158 248	3 077 298	75 783	92,9	**EUROPE**
GERMANY	2 903 036	228 306	2 597 100	77 630	89,5	**EUROPE**

Use the TABLE 3 above to answer the questions that follow.

5.1 How many countries are from European region? (2)

5.2 Calculate the mean number of active cases. (4)

5.3 Calculate the value of **Z**, the recovery rate in Turkey. (3)

5.4 Compare the data for USA and Spain and explain why the recovery rate of Spain is more than the recovery rate of USA. (3)

5.5 Calculate the inter-quartile range of the total number of deaths. (5)

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5.6 The Minister of Health has outlined the administration of two Vaccines in South Africa. Each Pfizer dose will cost the medical aids R 354,75 and Johnson & Johnson (J & J) will cost R 330,00 per dose including VAT. The vaccine is free to the public. There are six doses in a vial for the Pfizer vaccine and five doses in the vial for Johnson & Johnson. The Pfizer vaccine is a two-dose vaccine to be administered 21 days apart.

NB. Vial is a small closed or closable vessel especially for liquids.

Use the information above to answer the questions that follow.

5.6.1 Show that the amount of Johnson and Johnson per vial is R 1 650. (2)

5.6.2 Calculate the total amount of money the medical aids would pay if 70 pensioners (who are 60 years and above, and are on medical aids) and were given the Pfizer vaccine. (3)

[22]

[TOTAL: 150]

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Candidate Barcode label

NSC Answer Book

National Senior Certificate (Grade 12) – Exemplar 2026 *Confidential*

CENTRE NUMBER	
EXAMINATION NUMBER	
DATE	
SUBJECT CODE	
SUBJECT NAME	MATHEMATICAL LITERACY

Sequence No. on mark sheet

BOOK NUMBER		OF		BOOKS
PAPER NUMBER	1			

MARKER					MODERATOR'S INITIALS IN RELEVANT BLOCK																			
Question	Marks			Marker's Code & Initials	Marks			SM	Marks			DCM	Marks			CM	Marks			IM	Marks			EM
1																								
2																								
3																								
4																								
5																								
				TOTAL																				

CONTROLLED AND CERTIFIED CORRECT (SURNAME AND INITIALS OF EA)		READ INSTRUCTIONS ON THE NEXT PAGE.

This answer book consist of 17 pages

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FOLLOW THESE INTRUCTIONS CAREFULLY

1. Clearly write your name on the space provided (Candidate barcode label).
2. Answer ALL questions on the space provided.
3. No pages may be torn from this answer book.
4. Candidates may not retain the answer book or remove it from the examination room.
5. Answers must be written in blue/black ink as distinctly as possible.
6. Do not write in the margins.
7. If you require additional space for your answers:
   7.1 Use the additional space provided at the end of the answer book.
   7.2 When answering a question in the additional space, indicate clearly the question number in the column on the left-hand side.
8. Draw a need line through any work that must not be marked

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QUESTION 1

Q	Solution	Marks
1.1.1		(2)
1.1.2		(2)
1.2.3		(2)
1.1.4		(2)
1.1.5		(2)
1.2.1		(2)
1.2.2		(2)
1.2.3		(2)
1.2.4		(2)
1.2.5		(2)
1.2.6		(2)
1.3.1		(2)
1.3.2		(4)
1.3.3		(2)
		[30]

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QUESTION 2.1

ANNEXURE A

JOHN'S BUDGET FOR MARCH 2024

INCOME		**EXPENSES**	
Salary	R 21 000	Car repayment	**Q**
Monthly allowance	R 1 500	Home and car insurance	R 1 675
		Home loan repayment	R 3 600
		Electricity	R 950
		Water and sanitation	R 650
		Clothing account payment	R 800
		Petrol	R 1 500
		Food	R 4 500
		Entertainment	R 2 500
		Saving	R 1 000
		School fees and transport	R 1 950
		Cell phone	R 350
Total Income	**P**	**Total Expenses**	**R24 474**
		Surplus/Deficit	**T**

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QUESTION 2

Q	Solution	Marks
2.1.1		(2)
2.1.2		(2)
2.1.3		(2)
2.1.4		(2)
2.1.5(a)		(2)
2.1.5(b)		(3)
2.2		(5)

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2.3		
2.3.1		**(3)**
Q	**Solution**	**Marks**
2.3.2		**(5)**
2.3.3		**(7)**
		[33]

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QUESTION 3

TABLE 2

Table 2: 2025 NSC Performance by Type of Passes

Province	Total Wrote	Bachelor		Diploma		Higher Certificate		National Senior Certificate	
		No. Achieved	% Achieved	No. Achieved	% Achieved	No. Achieved	% Achieved	No. Achieved	% Achieved
Eastern Cape	106 561	44 267	**41.5**	29 822	**28.0**	15 498	**14.5**	89 692	**84.17**
Free State	38 205	16 728	**43.8**	11 926	**31.2**	5 407	**14.2**	34 067	**89.17**
Gauteng	140 927	67 861	**48.2**	39 055	**27.7**	18 510	**13.1**	125 428	**89.00**
KwaZulu Natal	171 368	89 161	**52.0**	46 791	**27.3**	19 098	**11.1**	155 253	**90.60**
Limpopo	100 973	43 052	**42.6**	28 538	**28.3**	15 389	**15.2**	86 986	**86.15**
Mpumalanga	67 114	28 610	**42.6**	19 603	**29.2**	9 854	**14.7**	58 084	**86.55**
North-West	40 913	18 166	**44.4**	12 142	**29.7**	5 896	**14.4**	36 205	**88.49**
Northern Cape	14 084	5 538	**39.3**	4 457	**31.6**	2 367	**16.8**	12 362	**87.77**
Western Cape	65 965	32 474	**49.2**	16 958	**25.7**	8 710	**13.2**	58 144	**88.14**
National	**746 110**	**345 857**	**46.4**	**209 292**	**28.1**	**100 729**	**13.5**	**656 221**	**87.95**

[Adapted www.education.gov.za]

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QUESTION 3

Q	Solution	Marks
3.1		(2)
3.2		(2)
3.3		(3)
3.4		(4)
3.5		(3)
3.6		(5)

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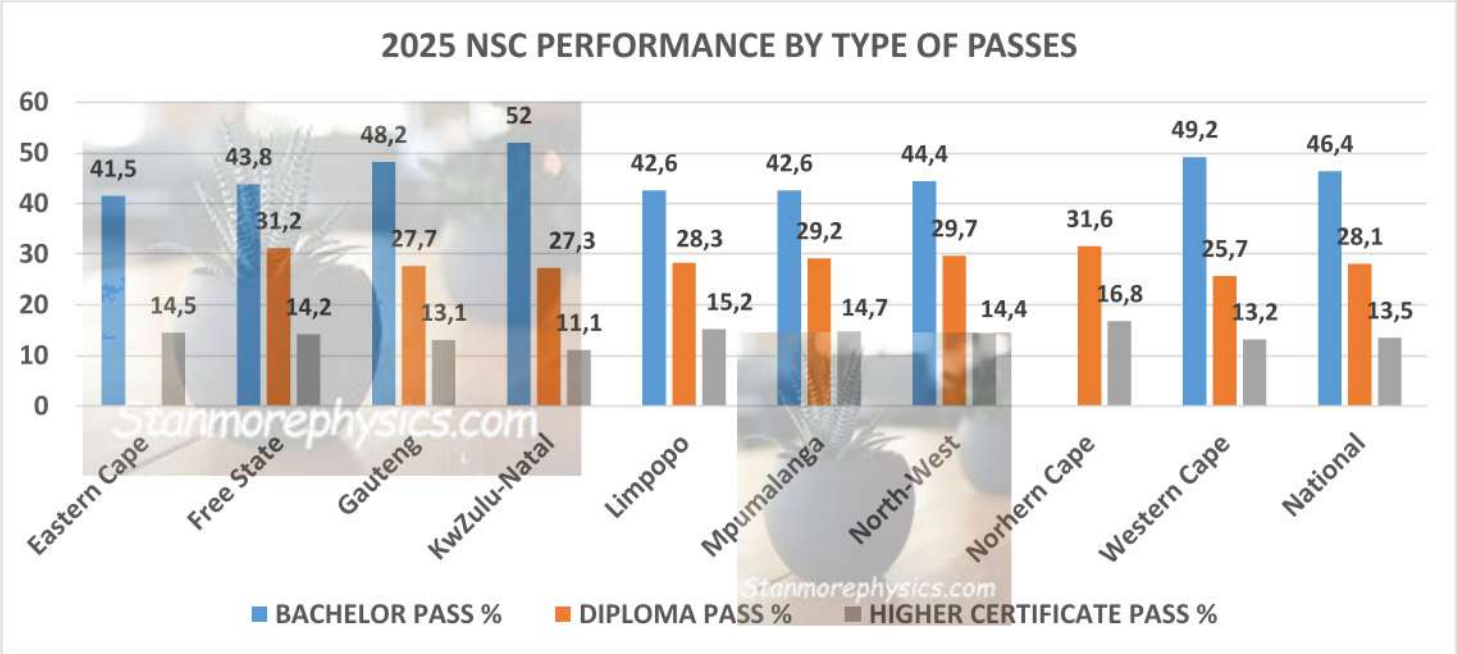
3.7		**(2)**
3.8		**(3)**

3.9



(4)

		[28]

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QUESTION 4.1

ANNEXURE B

INCOME TAX BRACKETS FOR 2020/2021 AND 2021/2022 FINANCIAL YEARS

TAX RATES FOR INVIDUALS – 2020/2021	
TAXABLE INCOME (Rand)	**RATES OF TAX (Rand)**
0 to 205 900	18% of taxable income
205 901 to 321 600	37 062 + 26% of taxable income above 205 900
321 600 to 445 100	67 144 + 31% of taxable income above321 600
445 100 to 584 200	105 429 + 36% of taxable income above 445 100
584 200 to 744 800	155 505 + 39% of taxable income above 584 200
744 801 to 1 577 300	218 139 + 41% of taxable income above 744 800
1 577 301 and above	559 646 + 45% of taxable income above 1 577 300
TAX RATES FOR INVIDUALS – 2021/2022	
TAXABLE INCOME (Rand)	**RATES OF TAX (Rand)**
0 to 216 200	18% of taxable income
216 201 to 337 800	38 916 + 26% of taxable income above 216 200
337 801 to 467 500	70 532 + 31% of taxable income above 337 800
467 501 to 613 600	110 739 + 36% of taxable income above 467 500
613 601 to 782 200	163 335 + 39% of taxable income above 613 600
782 201 to 1 656 600	229 089 + 41% of taxable income above 782 200
1 656 600 and above	587 593 + 45% of taxable income above 1656 600

TAX THRESHOLDS	**2020/2021**	**2021/2022**
Under 65	R 83 100	R 87 300
65 TO 74	R 128 650	R 135 150
75 and over	R 143 850	R 151 100
TAX REBATES	**2020/2021**	**2021/2022**
Under 65	R 14 958	R 15 714
65 TO 74	R 23 157	R 24 327
75 and over	R 25 893	R 27 198

MEDICAL AID TAX CREDITS	**2018/2019**	**2019/2020**	**2020/2021**	**2021/2022**
Main member with one dependent	R 620	R 620	R 638	R 664
Main member with two dependent	R 829	R 829	R 853	R 888
Each additional dependent	R 209	R 209	R 215	R 225

[Adapted from www.sars.gov.za]

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QUESTION 4

Q	Solution	Marks
4.1.1		(3)
4.1.2		(4)
4.2		
4.2.1		(2)
4.2.2		(2)
4.2.3		(2)
4.2.4		(6)

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4.2.5		**(7)**
4.3		
4.3.1		**(2)**
4.3.2		**(4)**

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4.3.3		**(4)**
		[37]

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QUESTION 5

Q	Solution	Marks
5.1		**(2)**
5.2		**(4)**
5.3		**(3)**
5.4		**(3)**
5.5		**(5)**
5.6.1		**(2)**

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Q	Solution	Marks
5.6.2		(3)
		[22]
		GRAND TOTAL MARKS: 150

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Q	Additional space	Marks

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Q	Additional space	Marks

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GRADE 12

MATHEMATICAL LITERACY PAPER 1

CORRECTED VERSION OF THE MARKING GUIDELINES

SEPTEMBER 2026

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MARKS : 150

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation
P	Penalty, e.g. for no units, incorrect rounding off, etc
R	Rounding off
NPR	No penalty for rounding
AO	Answer only
MCA	Method with consistent accuracy
RCA	Rounding consistent with accuracy

These marking guidelines consist of 16 pages

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NOTE:

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

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QUESTION 1 [30 MARKS]		ANSWER ONLY FULL MARKS	
Q	**Solution**	**Explanation**	**T&L**
1.1.1	I ✓✓ A	2A correct answer (2)	D L1 E
1.1.2	H ✓✓ A	2A correct answer (2)	F L1 E
1.1.3	J ✓✓A	2A correct answer (2)	D L1 E
1.1.4	F ✓✓A	2A correct answer (2)	D L1 E
1.1.5	C ✓✓A	2A correct answer (2)	D L1 E
1.2.1	✓ A Hire – purchase and ✓A Online credit OR R 280,45 p.m × 36 months and R 965,50 p.m × 12 months ✓A	1A first method / HP 1A second method / on-line (2) OR 1A both instalments (1)	F L1 E
1.2.2	✓✓A You pay for the gas set using a monthly instalment. Only after your final instalment you own the gas set. OR ✓✓A A payment option is where the store charges a deposit and then goes into a contract with the buyer to pay monthly instalment while using the product. **Accept:** • Paying for the gas set while is already in your possession /using it. ✓✓ A	2A correct explanation (2)	F L1 E

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1.2.3	9,5% ✓✓RT	2RT correct percentage **NPU** (2)	F L1 E
1.2.4	✓RT Total cost = R965,50 × 12 = R11 586,00✓ A	1RT using R965,50 1A correct answer (2)	F L1 E
1.2.5	Discount = R10 999 × $\frac{12,5}{100}$ ✓MA = R1 374,88 ✓A	1MA calculating 12,5% 1A discount amount **[accept R1 375]** (2)	F L1 E
1.2.6	C ✓✓ A OR **Accept:** Collected by a retail store from the customer who pays the tax included in the price of purchased goods. The store later files a tax return and forwards the tax takings to the government.✓✓A	2 A correct choice (2)	F L1 M
1.3.1	Tree diagram ✓✓ A	2A correct name (2)	P L1 E
1.3.2	X = Brown Bread Roll / BBR ✓✓ A AND Y = White Bread Roll Toasted/WBRT ✓✓ A	2A correct label AND 2A correct label (4)	P L1 E/M
1.3.3	Six/6 ✓✓ A OR Listing all 6 correct outcomes ✓ A	2A total number of outcomes (2) OR 1A listing (1)	P L1 M
		[30]	

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QUESTION 2 [33 MARKS]			
Q	**Solution**	**Explanation**	**T&L**
2.1.1	P = R21 000 + R1 500 ✓MA = R22 500 ✓ CA	1MA Adding correct values 1CA Correct Answer **AO** (2)	F L1
2.1.2	Q = R24 474 – (R1 675 + R3 600 + R950 + R650 + R800 + R1 500 + R4 500 + R2 500 + R1 000 + R1 950 + R350) ✓RT = R24 474 – R19 475 ✓MA = R4 999 ✓CA	1RT adding all correct values 1MA subtracting R19 475 1CA Answer **AO** (3)	F L1
2.1.3	T = R22 500 – R24 474 ✓MCA = – R1 974✓ CA OR (R1 974) Deficit ✓O	**CA from 2.1.1** 1MA subtracting 1CA correct answer 1O conclusion (3)	F L2
2.1.4.	Variable expenses = R950 + R650 + R800 + R1 500 + R4 500 + R2 500 + R 350 ✓MA = R11 250 ✓CA Reduction amount = R11 250 × 25% = R2 812.50 ✓MCA Total expenses = R24 474 – R2 812.50 = R21 661.50 ✓CA His claim is valid✓ O	1MA adding correct values 1CA Correct answer MCA reduction 1CA total expenses 1O Conclusion (5)	F L4
2.2.	Salary increase = R21 000 × 12.5% ✓MA = R2 625 ✓CA New Salary = R21 000 + R2 625 = R23 625 ✓CA New total income = R23 625 + R1 500 ✓MCA = R25 125 ✓CA	1MA Multiply by 12.5% 1CA Answer 1CA Correct answer 1MA adding allowance 1CA Correct answer	F L2

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	OR ✓M New Salary = R21 000 × 112.5% ✓ MA = R 23 625 ✓ CA New total income = R23 625 + R1 500 ✓MCA = R25 125 ✓CA OR ✓M New Salary = R21 000 × 1,125 ✓MA = R23 625 ✓CA New total income = R23 625 + RI 500 ✓MCA = R25 125 ✓CA	1M adding % to (112,5%) 1MA multiplying by 112,5% 1CA Answer 1MCA adding allowance 1CA answer OR 1M adding % to (1,125) 1MA multiplying by 1,125 1CA Answer 1MCA adding allowance 1CA answer (5)	
2.3.			
2.3.1	✓RT Cost excluding VAT = $\frac{R24\ 548{,}25}{1{,}15}$ ✓MA = R21 346,30 ✓CA OR ✓ RT Cost excluding VAT = $R24\ 548.25 \times \frac{100}{115}$ ✓MA = R21 346,30 CA ✓ OR ✓RT VAT amount = R24 548.25 × $\frac{15}{115}$ ✓MA = R3 201,95 Cost excluding VAT = R24 548.25 − R3 201,95 = R21 346,30 ✓ CA	1RT price of item 1MA calculating VAT 1CA price excluding VAT OR 1RT price of item 1MA calculating VAT 1CA price excluding VAT OR 1RT price of item 1MA calculating VAT 1CA price excluding VAT (3)	F L2
2.3.2	Deposit = R22 400,47 × 10% ✓MA = R 2 240,05 ✓CA Total monthly payments = R 574 × 48 months = R 27 552 ✓CA	1MA calculating 10% 1CA answer 1CA answer	F L3

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	Total amount paid = R27 552 + R2 240,05 ✓MA = R29 792.05 ✓CA OR ✓MA ✓MA Total amount paid = (R22 400,47 × 10%) + (R574 × 48) = R2 240.05 + R27 552 ✓✓MCA = R29 792.05 ✓CA	1 MA adding correct values 1CA answer OR 1MA calculating 10% 1MA multiplying by 48 2 MA adding correct values 1CA answer (5)	

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2.3.3	✓MA ✓MA	1MA calculating 10%	F
	Total repayment = (R 25 400 × 10%) + (R 638 × 48)	1MA multiplying by 48	L4
	= R2 540 + R 30 624 ✓CA	1CA adding correct values	
	= R 33 164 ✓CA	1CA answer	
	✓SF		
	% Interest = $\frac{\text{R33 164} - \text{R 25 400}}{R\ 25\ 400} \times 100\%$	1SF substitution	
	= 30,5669291%		
	= 30,6% ✓CA	1CA answer	
	His statement is valid ✓O	1O conclusion	
		NPR	
	OR	OR	
	Deposit = R 25 400 × 10%		
	= R 2540 ✓CA	1CA calculating 10%	
	Total monthly payments = R 638 × 48		
	= R 30 624 ✓CA	1CA total monthly payments	
	Total repayment = R 30 624 + R 2 540 ✓MA	1MA adding values	
	= R 33 164 ✓CA	1CA answer	
	✓ SF		
	% Interest = $\frac{\text{R33 164} - \text{R 25 400}}{R\ 25\ 400} \times 100\%$	1SF substitution	
	= 30,5669291%		
	= 30,6% ✓CA	1CA answer	
	His statement is valid. ✓O	1O opinion	
		(7)	
		[**33**]	

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QUESTION 3 [28 MARKS]			
Q	**Solution**	**Explanation**	**T&L**
3.1	Pass Percentage Achieved in Gauteng Province ✓RT $= \frac{125\,428}{140\,927} \times 100\%$ ✓MA = 89.00% OR ✓RT = 48,2 % + 27,7% + 13,1% ✓ MA = 89.00%	1RT Both numerator and denominator 1MA percentage calculation OR 1RT all correct values 1MA adding (2)	D L1
3.2	Western Cape ✓ ✓A	2A correct province (2)	D L1
3.3	**NB: DO NOT MARK THIS QUESTION**	(3)	D L2
3.4	Number of times KwaZulu-Natal is more than Northern Cape ✓A $= \frac{171\,368}{14\,084}$ ✓ MA = 12,1692941344 ✓ CA , more than 12 The claim is **not valid.** ✓O OR ✓RT KwaZulu-Natal divided by 12 $= \frac{171\,368}{12}$ ✓ MA = 14 280,666666667 ✓CA, more than 14 084 The claim is **not valid**✓ MA	1A correct numerator and denominator 1MA dividing 1CA simplification 1O conclusion OR 1RT 171 368 1MA dividing by 12 1CA simplification 1O conclusion (4)	D L4

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Q	Solution	Explanation	T&L
3.5	Ascending order: ✓RT ✓MA 4 457; 11 926; 12 142; 16958; **19 603**; 28 538; 29 822; 39 055; 46 791 median = **19 603** ✓CA	1RT all correct values 1MA correct order 1CA median **AO** (3)	D L2
3.6	90% of 746 110 $= 746\ 110 \times \frac{90}{100}$ ✓MA = 671 499 ✓CA Number needed more to achieve 90% Pass ✓MCA = 671 499 – 656 221✓ MA = 15 278✓ CA OR = 90% – 87,95% ✓ MA = 2,05% ✓ CA 2,05% of 746 110 $= 746\ 110 \times \frac{2,05}{100}$ ✓MCA = 15 295,255 ✓CA = 15 295 or 15 296 ✓R	1MA percentage concept 1CA simplification 1MCA correct values 1MA subtracting 1CA answer OR 1MA subtracting 1CA answer 1MCA percentage calculation 1CA simplification 1 R rounding (5)	D L3
3.7	KwaZulu-Natal ✓A Highest percentage passes in Bachelors (52,0%) ✓✓O	1A Correct Province 2O reason (3)	D L4
3.8	Triple/Compound bar Graph ✓✓A	1A Triple/Compound 1A bar (2)	D L1

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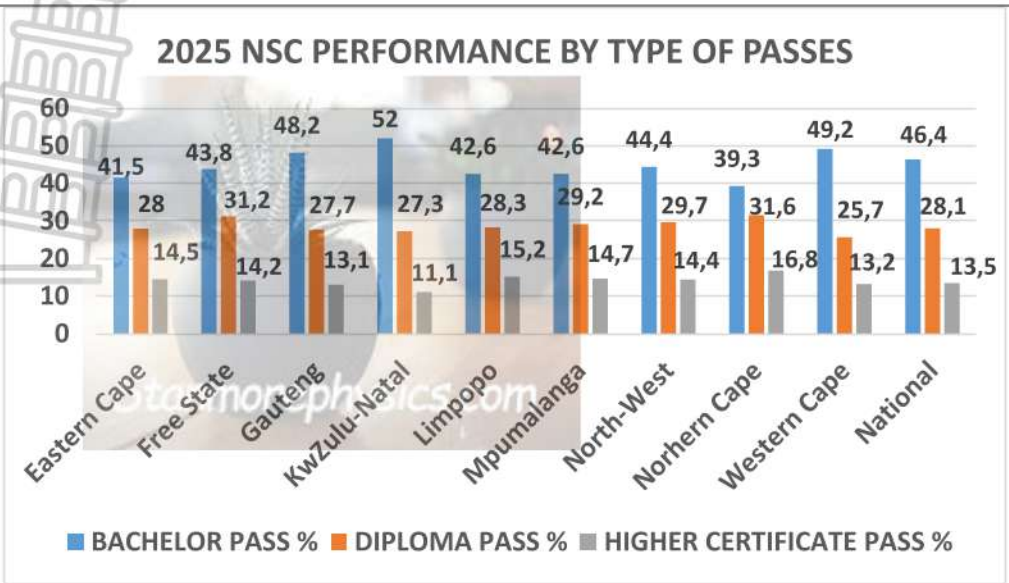
3.9	 ✓A Accurate mark/point ✓CA Completed bar (EC:28 - Diploma), ✓A Accurate mark/point ✓CA Completed bar (NC:39,3 - Bachelor), (4)	D L2
	[25] $= [\frac{\text{Marks Obtained}}{25} \times 28]$	

QUESTION [37 marks]

Q	Solution	Explanation	T&L
4.1.1	Initial Salary = \$ 4 235 × $\frac{100}{88}$ ✓✓MA = \$ 4 812,50 ✓CA OR Initial Salary = \$ 4 235 ÷ 0,88 ✓✓MA = \$ 4 812,50 ✓CA	2MA multiply by 100 and divide by 88 1CA correct answer OR 2MA dividing by 0,88 1CA correct answer (3)	F L2
4.1.2	Annual salary in dollars = \$ 4 235 × 12 ✓MA = \$ 50 820 ✓CA Annual salary in rands = 50 820 × R16,78 ✓C = R852 759,60 ✓CA OR Annual salary in rands = 4 235 × 12 × R 16,78 ✓MA ✓CA = 50 820 × R16,78✓C = R852 759,60 ✓CA	1 MA multiplying by 12 1CA simplification 1C conversion 1CA correct answer OR 1MA multiplying by 12 1CA simplification 1C conversion 1CA answer (4)	F L3

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4.2			
4.2.1	Annual pension contributions = R852 759,60 × 7,5% ✓MCA = R63 956,97 ✓CA OR Monthly pension contributions = $ 4235 ×7,5% ✓MA = 317,625 × R16,78 Annual pension contributions = R5 329,7475 × 12 = R63 956,97 ✓CA	**CA from 4.1.2** 1MA calculating 7.5% 1CA Answer OR 1MA calculating 7.5% 1CA Answer (2)	F L1
4.2.2	Tax rebates reduces the amount of tax payable. ✓✓O	2O Explanation (2)	F L4
4.2.3	The amount for medical aid tax credits increased from 2020/2021. ✓✓O OR The amount for medical aid tax credits remains the same between 2018/2019 and 2019/2020 ✓✓O	2O Opinion (2)	F L3
4.2.4	Taxable income = R852 759,60 − R63 956,97 = R788 802,63 ✓A Annual tax in 2020/2021 ✓RT Annual tax = R218 139 + [41% × (R788 802,63 − R744 800)] = R218 139 + R18 041,08 = R236 180,08 ✓CA Medical aid tax credits = (R853 + R215 × 2) × 12 = R15 396 ✓A ✓RT Annual tax payable = R236 180,08 − R14 958 − R15 396 = R205 826,08 ✓CA	**CA from 4.1.2 and 4.2.1** 1A correct answer 1RT correct tax bracket 1CA simplification 1A correct answer 1RT rebates 1CA answer (6)	F L3

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4.2.5	Annual tax in 2021/2022 ✓RT Annual tax = R229 089 + [41% × (R788 802,63−R782 200)] ✓SF = R229 089 + R 2 707,08 = R231 796,08 ✓CA Medical aid tax credits = (R888 + R225 × 2) ×12 = R16 056 ✓CA Annual tax payable = R231 796,08 − R15 714 − R16 056 ✓MA = R200 026,08 ✓ CA Her claim is invalid. ✓O	**CA from 4.1.2 and 4.2.1** 1RT correct tax bracket 1SF substituting 1CA answer 1CA correct answer 1MA subtracting correct values 1CA answer 1O conclusion (7)	F L4
4.3			
4.3.1	Selling price = R21,00 × 125% ✓M ✓MA = R 26,25 ✓CA OR Selling price = R21,00 × 1,25 ✓A ✓MA = R26,25 ✓CA OR Profit = R 21,00 × 25% = R5,25 ✓CA Selling price = R 21,00 + R 5,25 ✓MA = R 26,25 ✓CA	1M calculating profit 1MA 125% 1CA correct answer OR 1M calculating profit 1MA 1,25 1CA correct answer OR 1CA calculating profit 1MA adding correct values 1CA answer (3)	F L2

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4.3.2	Income = R26,25 × 40 = R1 050 ✓CA Cost = R21,00 × 40 = R 840 ✓CA Profit = R1 050 − R840 ✓MA = R210 ✓CA OR ✓MA ✓MA Profit = (R26,25 × 40) − (R21,00 × 40) = R1 050 − R840 ✓MCA = R210 ✓CA OR Profit = R26,25 – R21,00✓MA = R 5,25 ✓CA Profit for 40 T-shirts = R5,25 × 40 ✓MA = R210 ✓CA	1CA correct income 1CA correct cost 1MA subtracting correct values 1CA simplification OR 1MA calculating income 1MA calculating cost 1MCA subtracting 1CA answer OR 1MA profit calculation 1CA simplification 1MA multiplying by 40 1CA answer (4)	F L2
4.3.3	2 + 3 = 5 ✓A Caroline's profit = R 210 × $\frac{3}{5}$ ✓MA = R 126 ✓CA Her friend's profit = R 210 × $\frac{2}{5}$ = R 84 ✓CA OR Her friend's profit = R 210 − R 126 = R 84 ✓A	**CA from 4.3.1.** 1A adding ratios 1MA multiplying by $\frac{3}{5}$ 1CA correct answer 1CA correct answer OR 1CA correct answer (4)	F L2
		[37]	

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QUESTION 5 [22 MARKS]			
Q	**Solution**	**Explanation**	**T&L**
5.1	Six/6 ✓✓A	2A Correct number (2)	D L1
5.2	✓RT Mean $= \frac{6\,869\,132 + 1\,253\,847 + 788\,193 + 4\,436\,324 + \ldots + 228\,306}{10}$ ✓MCA $= \frac{15\,270\,730}{10}$ ✓ M = 1 527 073 ✓CA	1RT all correct values 1MCA 15 270 730 1M mean concept 1CA correct answer (4)	D L2
5.3	Turkey recovery rate: ✓ A $Z = \frac{3\,130\,977}{3\,529\,601} \times 100\%$ ✓MA = 88,7062588% = 88,7%✓CA	1A correct numerator & denominator 1MA percentage concept 1CA Answer NPR (3)	D L2
5.4	The total number of infections in USA is more than the one for Spain. ✓O USA has more active cases even though their number of recoveries is high. ✓O Both the high number of infections and active cases in USA contributes to their recovery rate being less than that of Spain. ✓O	3O Explanation (3)	D L4

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5.5	Ascending order: **Q1** 32 456 ; 75 783 ; **77 630** ; 96 785 : **100 717 ; 111 326** : 126 862 ; **165 577** ; 333 153 ; 569 282 ✓ MA **Q3** Q1 = 77 630 ✓A Q3 = 165 577 ✓A 1QR = 165 577 – 77 630 ✓MA = 87 947 ✓CA	1MA correct order IA correct Q1 1A correct Q3 1MA subtracting 1CA simplification (5)	D L3
5.6			
5.6.1	✓RT Amount = R330,00 × 5 ✓MA = R1 650,00	1RT R330 IMA multiplying by 5 (2)	F L2
5.6.2	Total amount = R354,75 × 70 × 2 ✓✓MA = R49 665,00 ✓CA	2MA multiplying by 70 and 2 1CA answer (3)	F L2
		[22]	
		GRAND TOTAL MARKS: 150	