



**KWAZULU-NATAL PROVINCE**

**EDUCATION**  
REPUBLIC OF SOUTH AFRICA

# **CURRICULUM GRADE 10 -12 DIRECTORATE**

## **NCS (CAPS) SUPPORT**

### **LAST PUSH ~~TEACHER~~ REVISION DOCUMENT**



**GRADE 12**

## **MATHEMATICAL LITERACY**

**2025**

**PREFACE**

This document serves to assist Mathematical Literacy learners on how to deal with curriculum. It also captures the challenging topics in the Grade 10 -12 work. Activities should serve as a guide on how to assess topics dealt with in this document.

It is hoped that teachers will find this document useful for better learner performance in 2025 and that they will benefit from this document.

Provincial Mathematical Literacy Subject Advisors and Lead Teachers are to be commended for their contributions and cooperation during the preparation and production of this document.

**The document will cover the following:**

A	<b>DATA HANDLING</b>	
B	<b>FINANCE</b>	
C	<b>MEASUREMENT</b>	
D	<b>MAPS AND PLANS</b>	
E	<b>PROBABILITY</b>	

<b>SYMBOL</b>	<b>EXPLANATION</b>
MA	Method with accuracy
MCA	Method with consistent accuracy
CA	Consistent accuracy
A	Accuracy (Answer)
C	Conversion
S	Simplification
RT/RG/RD	Reading from a table/ graph/ diagram
NPR	No penalty for units/rounding
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example
J	Justification
R	Rounding off/
F	deriving a formula
E	Explanation
U	Units
AO	Answer only full marks

**Topics in this Learner Support Document are arranged according to the 2025 Grade 12 ATP**

**MARKING GUIDELINE QUESTION 1**

	Solution	Explanation	M & L
1.1	Amount paid by Bongeka for her rented apartment✓✓	2A correct explanation	FL1
1.2	UMK 2255✓✓	2A correct ref no	FL1
1.3	Easier to read on long bank statements/ to identified clients who have paid./ convenience/ filing purposes✓✓	2 A correct explanation	F L4
1.4	$A = R\ 3\ 100 - R\ 3\ 096,68 = R3,32$ ✓	1MA subtracting correct values 1A simplification	F L1
1.5	Positive balance, paid more than owed. ✓✓	2 A correct reason	FL4
1.6	$R\ 2\ 385,68 \times \frac{100}{115} = R\ 2\ 074,50$ ✓	1MA dividing by 1.15 1A simplification	FL 2
1.7	$VAT = R\ 2\ 385,68 - R\ 2\ 075,50 = R\ 313.15$ ✓	1MA subtracting correct values 1CA answer	FL 2
1.8	$\frac{20.25}{20.25} : \frac{1600}{2025} = 1: 79$ ✓	1MA correct order 1A	
1.9	$\frac{4}{11} = 0,3636 = 0,36$ ✓✓	1A numerator 1A denominator 1CA answer	FL2
1.10	$\frac{1\ 600}{2\ 385,68} \times 100 = 67,066 = 6\ 707$ ✓	1RT correct levy 1RT correct denominator 1CA simplification	
1.11	All electronic bank payments/all bank deposits. ✓✓	2A correct option	FL1
1.12	$R45 \times 11 = R\ 495$ ✓	1RT correct levy 1MA multiplying correct values 1CA simplification	FL2
1.13	$R\ 1\ 600 \times \frac{105.65}{100} = 1\ 690,40$ ✓	1A calculating 105.65 1M multiplying by 105.65 1M dividing by 100 1CA answer	
1.14	$R\ 450 \div R1\ 600 \times 100 = 28,125\%$ ✓ Invalid	1RT correct levy 1RT correct denominator 1M multiplying by 100 1 CA answer 1 A justification✓	

**MARKING GUIDELINE QUESTION 2**

	Solution	Explanation	M&L
2.1	Client number = 6662381✓✓	2RT correct number	F L1
2.2	$A = R\ 7\ 827,31 - R\ 6\ 177,31 = R\ 1\ 650$ OR $A = R\ 1\ 050,00 + R\ 1895,00 + R\ 2\ 330 + R\ 785,56 + R\ 68,50 + R\ 48,25 = R\ 6\ 177,31$ ✓ $A = R\ 6\ 977,30 + R\ 850,01 - R\ 6\ 977,30 = R\ 1650$ ✓	1MA adding all premiums 1MA adding discount. 1MCA subtracting total premium 1CA simplification	F L3
2.3	$\text{Percentage discount} = \frac{850,01}{7827,31} \times 100\% = 10,86\%$ ✓✓	1RT correct amount 1 MA correct % calculation 1CA simplification	FL3
2.4	$R\ 1\ 050 : R\ 6\ 500 = 21 : 130$ ✓	11MA correct order 1A simplification	
2.5	Claim amount = $R\ 68\ 350,00 - R\ 6\ 500 = R\ 61\ 850,00$ ✓	1RT identifying R 6500 1A claim amount	FL1
2.6	$R\ 6\ 977,30 \times \frac{100}{115} = R\ 6\ 067,22 = R\ 6\ 977 - R\ 6\ 067,22 = R\ 910,08$ ✓	1 A correct VAT calculation 1MA multiplying by 100/115 1A simplification	
2.7	Venue is an older model/ Polo is a high risk vehicle/venue is an older model/younger driver in the polo. ✓✓	2O reasoning	FL4
2.8	The premiums will increase as the household content value will also increase. ✓✓		FL4
2.9	Avoid fraud/protect his identity and location✓✓	2O reasoning	FL4
2.10	0% /impossible✓✓	2A answer	P L2



QUESTION 3 [25 MARKS]			
Ques	SOLUTION	EXPLANATION	T&L
3.1.1	Credit is the amount of money deposited into Zandile's account ✓✓E	2E Explanation (2)	F L1 E
3.1.2	11087622502 ✓✓RT	2RT Correct account number (2)	F L1 E
3.1.3	$R1,60 + R69,00 + R110,00$ ✓M $= R180,60$ ✓A	1M Adding correct values 1A Amount (2)	F L1 E
3.1.4	$R10\,078,41 - R2\,100,35$ ✓MA $= R7\,978,06$ ✓A	1MA Subtracting correct values 1A Salary amount (2)	F L2 M
3.1.5	Withdrawal fees = R4,3125 per R200 or part thereof $R3\,180 \div 200 = 31,8 = 32$ ✓M $R4,3125 \times 32$ ✓MA = R69,00	1M Number of R200 1MA Multiplying by 32 (2)	F L2 E
3.2			
3.2.1	✓RT $R5\,250,00 \times 1,15$ ✓MA $= 6\,037,50$	1 RT Correct value 1MA Adding VAT 1A Amount including VAT (3)	F L2 E
3.2.2	$6\,037,50 + R900\,000$ ✓MA $= R906\,037,50$ ✓A	1MA Adding correct values 1A Initial fee (2)	F L1 E
3.2.3	$1,00\% = 100$ Basis points $\Delta = 25$ Basis points $\therefore \frac{25}{100} \times 1\%$ $= 0,25\%$ ✓C $\therefore 9,52\% - 0,25\%$ ✓MA $= 9,27\%$ ✓CA	1C interest rate 1MA Subtracting correct values 1CA New interest rate (3)	F L2 M
	Interest = $\frac{B \times n \times r}{365}$ $\frac{\check{RT} \quad \check{M}}{909\,541,07 \times 31 \times 9,27}$ $= \frac{365}{7\,160,95}$ ✓CA	CA from 1.2.2 1RT Correct balance 1M Number of days 1CA Interest amount (3)	F L3 D
3.2.4	Total interest = Total monthly payments – loan amount $(20 \times 12) = 240$ h ✓MA $= R8\,527,41 \times 240 - 906\,037,50$ ✓MCA $= R1\,140\,540,90$ ✓CA The statement is correct ✓J	1MA Number of months 1MCA Subtracting correct values 1CA interest amount 1J Justification (4)	F L4 D

QUESTION 4			
Ques	SOLUTION	EXPLANATION	T&L
4.1.1	16 Days ✓✓A	2A Number of days (2)	F L1 E
4.1.2	17 Transactions ✓✓A	2A Number of transactions (2)	F L1 E
4.1.3	R29, 67 ✓✓A	2A Amount (2)	M L1 E
4.1.4	✓RT R 6 205, 48 – R6 204, 38 ✓MA R1, 10 ✓A	1RT Correct values 1MA Subtracting values 1A Amount (3)	M L2 E
4.1.5	382,14 + 22 695,98 + 191,07 = R23 269, 19 ✓MA $\therefore \frac{5\,569,75}{23\,269,19} \times 100\% \checkmark \text{MCA}$ ✓CA = 23, 94% ✓R	1MA Total deposited amounts 1MCA Percentage concept 1CA Percentage 1R Rounding (4)	F L3 D
4.1.6	✓A $P = \frac{9}{14} \checkmark A \times 100\% = 64,29\% \checkmark \text{CA}$	1A Numerator 1A Denominator 1CA Answer (3)	F L2 M
4.2			
4.2.1	Simple interest is an interest charge that Simphiwe must pay ABC LOANS and is calculated from the original amount ✓✓E	2E Explanation (2)	F L1 E
4.2.1	$\frac{7,5\%}{12} \checkmark \text{MA}$ = 0,625% ✓A	1MA Dividing by 12 1A Monthly rate (2)	F L1 E
4.2.2	$\frac{7,5}{100} \times R10\,000,00 = R750,00 \checkmark \text{M}$ $\therefore 750,00 \times 3 \checkmark \text{MA}$ = 2 250,00 ✓CA	1M Interest per annum 1MA Multiplying by 3 1CA Amount (3)	F L3 M
4.2.3	3 Years $\times 12 = 36 \quad h \checkmark \text{M}$ R10 000, 00 + R2 250, 00 = R12 250, 00 $\frac{12\,250}{36} \checkmark \text{MA}$ = 340, 28 ✓A	1M Number of months 1MA Dividing correct values 1A Amount (3)	F L2 M
4.2.4	107,5 ÷ 100 = 1, 075 1 <sup>st</sup> Year: R10 000, 00 $\times 1, 075 = R10\,750, 00 \checkmark \text{MA}$ 2 <sup>nd</sup> Year: R10 750, 00 $\times 1, 075 = R11\,556, 25 \checkmark \text{MA}$ 3 <sup>rd</sup> Year: R11 556, 25 $\times 1, 075 = R12\,422, 97 \checkmark \text{MA}$ R12 422,97 – R12 250, 00 = R172, 97 ✓MCA His statement is correct ✓J	1MA Amount of the 1 <sup>st</sup> year 1MA Amount of the 2 <sup>nd</sup> year 1MA Amount of the 3 <sup>rd</sup> year 1MCA Subtracting correct values 1J Justification (5)	F L4 D
			[31]

**QUESTION 5**

5.1	A tax bracket shows the percentage of tax a person must pay based on the amount of income they earn. ✓ ✓	2 Correct definition (2)	F L1 E
5.2	As a person's income increases ✓ they move into higher tax brackets, and the portion of income within each bracket is taxed at the corresponding rate. ✓ ✓	3 O Justification (3)	F L4 M
5.3	Gratuity to be taxed = R 600 000 – R 500 000 ✓ = R 100 000 ✓	1M subtracting 1A answer (2)	F L1 E
5.4	Total Amount = R 3 000 × 12 × 10 ✓ = R 360 000 ✓	1MA multiplying by 12 and 10 1A answer (2)	F L1 M
5.5	Annual Income = (R22 000 × 12) = R 264 000 ✓ Tax payable = R42 678 + [0,26 × (264 000 – 237 100)] ✓ = R 49 672 ✓	1A annual income 1SF 1CA answer (3)	F L2 M
5.6	MTC = R 728 × 12 = R 8736 ✓ Final Tax payable = R 49 672 – R 17 235 – R 8 736 ✓ = R 23 701 ✓	1MA multiplying by 12 1MA subtracting rebate and MTC 1A correct answer (3)	F L2 M
5.7	Medical credits and tax rebates reduce the total amount of tax a person must pay to SARS. ✓ ✓	2A correct answer (2)	F L1 E
5.8	Yes. ✓ The tax system seems fair because Mr. Mokoena received a R600,000 gratuity, but only R100,000 was taxable after deductions. ✓ He also got rebates and medical credits, which reduced his final tax to a small portion of his R264,000 annual pension. ✓	1Opinion 2 Justification (3)	F L4 D



5.9	$\text{Annual Income} = R\ 19\ 000 \times 12 \checkmark = R\ 228\ 000 \checkmark$ $\text{Tax Payable} = 18\ \% \times R\ 228\ 000 \checkmark$ $= R\ 41\ 040 \checkmark - R\ 17\ 235 - R\ 8\ 736 \checkmark$ $= R\ 15\ 069 \checkmark$ $\text{Difference} = R\ 23\ 701 - R\ 15\ 069$ $= R\ 8\ 632 \checkmark$	1A multiplying by 12 1S simplification 1A correct bracket 2MA subtracting 1Simplification 1A answer (7)	F   L3 D
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### QUESTION 6 [27]

6.1	Tax discount, reduces tax payable to SARS $\checkmark \checkmark$	2A correct explanation (2)	F L1 M
6.2	$\text{Annual Salary} = (R\ 45\ 000 \times 12) + R\ 50\ 000 = R\ 590\ 000$ $\checkmark \checkmark$	1MA adding bonus 1A answer (2)	F L1 E
6.3	$R\ 165\ 689 \times \checkmark 0,18 \checkmark = R\ 29\ 824$	2MA multiplying 0.18 (2)	F L1 M
6.4	$\text{Tax payable} = 121\ 475 + [0,36 \checkmark \times (590\ 000 - 512\ 800)] \checkmark$ $= R\ 149\ 267 - \checkmark R\ 17\ 235 - (974 \times 12) \checkmark$ $= R\ 120\ 344 \checkmark$	2SF substitution 2MA subtracting rebates and MTC 1CA answer (5)	F L3 M
6.5	$\text{Monthly Net Salary} = R\ 590\ 000 - R\ 120\ 344 \checkmark$ $= R\ 469\ 656 \div 12 \checkmark$ $= R\ 39\ 138 \checkmark$	<b>CA from 6.4</b> 1MCA subtracting 1A dividing 1 CA answer (3)	F L2 E
6.6	Rebates and medical tax credits reduce $\checkmark \checkmark$ the amount of tax Thabo must pay. SARS includes them to make the tax system fairer and to support people with lower incomes or medical expenses. $\checkmark \checkmark$	2O opinion 2O justification (4)	F L4 M
6.7	$(R\ 857\ 900 \checkmark - 673\ 000) \times 0,39 \checkmark$ $= 72\ 111 \checkmark + 179\ 147 \checkmark$ $= R\ 251\ 258$	2SF 2MA adding (4)	F L2 E
6.8	$\text{Monthly Tax} = R\ 120\ 344 \div 12 \checkmark = R\ 10\ 028,67$ $\text{Net salary} = R\ 45\ 000 \checkmark - R\ 10\ 028,67$ $= R\ 34\ 971,33 \times 0,15 \checkmark \times 6 \checkmark$	1A dividing by 12 1MA subtracting 2MA multiplying 1A answer	F



	= R 31 474.20 ✓		(5)	L3 D																									
6.9	17 235 ✓ ÷ 0,18 ✓ = 95 750		1A correct rebate 1A dividing by 0.18 (2)	F L1 E																									
QUESTION 7 [25 Marks]																													
Q	SOLUTION		EXPLANATION	L&T																									
7.1.1	Tariff = R43,69 ✓ ✓ RT		2RT correct tariff (2)	L1 F E																									
7.1.2	VAT Exclusive tariff = $\frac{R29,93 \checkmark \text{MA}}{1,15 \checkmark \text{A}}$  ≈ R26,03 ✓ CA		1MA R29,93 1A dividing by 1,15 CA answer (3)	L1 F E																									
7.1.3	Step 2 ✓ ✓ RT  OR  Above 6 kℓ to 10,5 kℓ ✓ RT		2RT correct level (2)	L1 F E																									
7.1.4	<table><tr><th>STEP</th><th>Volume/Amount of water used 1kℓ = 1 000 Litres</th><th>Level 4 R/kℓ incl. VAT</th></tr><tr><td>1</td><td>0 – 6kℓ</td><td>6 × R4,65 = R27,90 ✓ MA</td></tr><tr><td>2</td><td>Above 6kℓ - 10kℓ</td><td>4 × R17,75 = R71,00 ✓ MA</td></tr><tr><td>3</td><td>Above 10kℓ - 20kℓ</td><td>5 × R25,97 = R129,85 ✓ MA</td></tr><tr><td>4</td><td>Above 20kℓ - 35kℓ</td><td>-</td></tr><tr><td>5</td><td>Above 35kℓ - 50kℓ</td><td>-</td></tr><tr><td>6</td><td>More than 50kℓ</td><td>-</td></tr><tr><td colspan="2"></td><td>Total = R228,75 ✓ CA</td></tr></table>	STEP	Volume/Amount of water used 1kℓ = 1 000 Litres	Level 4 R/kℓ incl. VAT	1	0 – 6kℓ	6 × R4,65 = R27,90 ✓ MA	2	Above 6kℓ - 10kℓ	4 × R17,75 = R71,00 ✓ MA	3	Above 10kℓ - 20kℓ	5 × R25,97 = R129,85 ✓ MA	4	Above 20kℓ - 35kℓ	-	5	Above 35kℓ - 50kℓ	-	6	More than 50kℓ	-			Total = R228,75 ✓ CA	1MA correct level 1  1MA correct level 2  1MA correct level 3  1CA answer (4)		L3 F M	
STEP	Volume/Amount of water used 1kℓ = 1 000 Litres	Level 4 R/kℓ incl. VAT																											
1	0 – 6kℓ	6 × R4,65 = R27,90 ✓ MA																											
2	Above 6kℓ - 10kℓ	4 × R17,75 = R71,00 ✓ MA																											
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4	Above 20kℓ - 35kℓ	-																											
5	Above 35kℓ - 50kℓ	-																											
6	More than 50kℓ	-																											
		Total = R228,75 ✓ CA																											
7.1.5	<table><tr><th></th><th>2023</th><th>2024</th></tr><tr><td>0 – 35kℓ</td><td>104,28</td><td>106,56</td></tr><tr><td>&gt;35kℓ</td><td>118,00</td><td>120,60 ✓ MA</td></tr><tr><td colspan="3"></td></tr><tr><td>23kℓ - 6kℓ</td><td colspan="2">6kℓ × R29,93 = R179,58 ✓ MA</td></tr><tr><td>17kℓ - 4kℓ</td><td colspan="2">4kℓ × R52,44 = R209,76 ✓ MA</td></tr><tr><td>13kℓ -</td><td colspan="2">13kℓ × R114 = R1 482</td></tr><tr><td colspan="2"></td><td>Total = R1 871,34 ✓ CA</td></tr></table>			2023	2024	0 – 35kℓ	104,28	106,56	>35kℓ	118,00	120,60 ✓ MA				23kℓ - 6kℓ	6kℓ × R29,93 = R179,58 ✓ MA		17kℓ - 4kℓ	4kℓ × R52,44 = R209,76 ✓ MA		13kℓ -	13kℓ × R114 = R1 482				Total = R1 871,34 ✓ CA	1MA correct calculations in 2024  1MA correct values 1A correct values  1CA answer (4)		L3 F D
	2023	2024																											
0 – 35kℓ	104,28	106,56																											
>35kℓ	118,00	120,60 ✓ MA																											
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17kℓ - 4kℓ	4kℓ × R52,44 = R209,76 ✓ MA																												
13kℓ -	13kℓ × R114 = R1 482																												
		Total = R1 871,34 ✓ CA																											

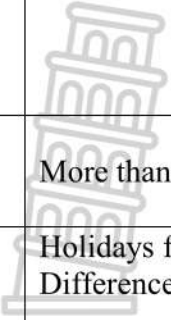
			<b>[15]</b>
7.2.1 (a)	Maximum difference in bracket 1 = 350 kW/h ✓✓RT	2RT reading from a table (2)	L1 F E
(b)	Convert cents to Rands = $\frac{104,26\text{m}}{100}$ ✓MA  Cost in 2022 = $\frac{420\text{m}}{1,0426}$ ✓MA = 402,8390 ✓S = 402,84 kW/h used ✓CA	1MA substituting by 104,26  1A numerator 1A denominator 1S simplification 1CA conversion  <b>NPR</b>  (5)	L3 F M
7.2.2	Percentage increase = $\frac{\text{New} - \text{Old}}{\text{Old}} \times 100\%$  $= \frac{R1,206 - R1,18}{R1,18} \times 100\%$ ✓SF × 100 ✓MA $= 2,203\%$ ✓CA	1SF substitution 1MA percentage concept 1CA answer  (3)	L3 F E
Stanmorephysics.com			<b>[10]</b>

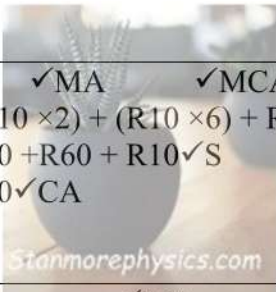
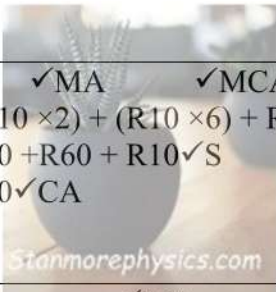
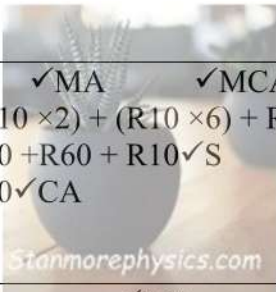
**QUESTION 8:**

No	Question	Explanation	TL
8.1.1	Tariff is the charge per minute of call time ✓✓O	2O explanation (2)	F 2 E
8.1.2	The charges will be fixed at R999 if they do not exceed the free 200 minutes; you will only pay for minutes exceeding 200 ✓✓O	2O explanation (2)	F 4 M
8.1.3	<b>Option 1</b> Cost = R799 + 1 × 200 ✓MA = R799 + 200 = R999 ✓A  <b>Option 2</b> Cost = R999 + 1,50 × (200-200) ✓MA = R999 ✓A Invalid claim, she will pay the same amount ✓O	1MA correct substitution 1A correct answer  1O opinion  (5)	F 3 E
8.1.4	✓A	1A Title 1A X-axis 1A Y-axis 1A break-even	F 2 M

		1A correct points 1A joining the points	(6)
8.1.5	They both have a fixed amount that will be paid, regardless of whether the calls have been made. ✓✓O	2O explanation (2)	F 4 M
8.1.6	0 – 200 and >200 ✓✓MA	2MA correct option (2)	F 2 D
8.2.1	$12 \div 10 \checkmark \text{MA}$ $= \text{R}1,20 \checkmark \text{A}$ <p style="text-align: center;"><b>OR</b></p> $24 \div 20 \checkmark \text{MA}$ $= \text{R}1,20 \checkmark \text{A}$	1MA dividing by 10 1A answer (2)	F 2 E
8.2.2	Cost = $\text{R}1,20 \checkmark \text{MA} \times \text{talk time in minutes} \checkmark \text{S}$ $\text{Cost} = \text{R}1,20 \times 50 \checkmark \text{SF}$ $\text{Cost} = \text{R}60,00 \checkmark \text{CA}$	1MA 1S 1SF 1CA answer (4)	F 2
<b>QUESTION 9</b>			
<b>QUES</b>	<b>SOLUTION</b>	<b>EXPLANATION</b>	<b>T&amp;L</b>
9.1.1	$\text{R}10 \checkmark \text{RT}$	2RT correct amount. (2)	F L1 E
9.1.2	$\checkmark \text{M}$ Discount = $20\% \times \text{R}25$ $= \text{R}5 \checkmark \text{A}$ Discount price = $\text{R}25 - \text{R}5$ $= \text{R}20 \checkmark \text{CA}$ <p style="text-align: center;"><b>OR</b></p> $\checkmark \text{A}$ Discount price = $80\% \times \text{R}25 \checkmark \text{M}$	1M multiplying by 20% 1A answer  1CA answer <p style="text-align: center;"><b>OR</b></p>	F L3 M



	 $= R20 \checkmark CA$	1A 80% 1M multiplying by 80% 1CA answer (3)	
9.1.3	$\checkmark A$ $\checkmark A$ More than 3 hrs – 4 hrs, covered parking space	1A time interval 1A covered parking (2)	F L2 M
9.1.4	Holidays fee = R15 $\checkmark RT$ Difference = R20 – R15 $\checkmark MA$ $= R5 \checkmark$	1RT correct amount 1MA subtraction 1CA answer (3)	F L3 E
9.1.5	The vehicle may be protected from heavy storms/rain, and direct sunlight $\checkmark \checkmark O$	2O Opinion (2)	F L4 E
9.2.1	50 km $\checkmark \checkmark RT$	2RT (2)	F L1 E
9.2.2	$\checkmark RT$ Total cost = R150 + R350 $\checkmark MA$ $= R500 \checkmark CA$	1RT reading both correct values 1MA adding values 1CA answer (3)	F L2 E
9.2.3	$\checkmark RT$ $\checkmark MA$ Fixed cost = R1,57 + R2,28 $= R3,85$	1RT correct values 1MA adding values (2)	F L1 E
9.2.4	$\checkmark MA$ Cost/km = 30% $\times$ R3,85 $= R1,155$ Cost/km = R1,155 + R3,85 $\checkmark MA$ $= R5,005$ $= R5 \checkmark CA$  <b>OR</b> $\checkmark MA$ $\checkmark MA$ Cost/km = 130% $\times$ R3,85 $= R5,005$ $= R5 \checkmark CA$	1MA multiplying by 30%  1MA adding values  1CA  <b>OR</b>  2MA multiplied by 130%  1CA answer (3)	F L2 M
9.2.5	Fixed cost = R2,50 + R1,80 $\checkmark SF$ $= R4,30$ Total cost = R4,30 $\times$ 75km $= R215 \checkmark MCA$  Total cost = R5 75km $= R375 \checkmark MCA$	1SF correct fixed cost   1MCA cost   1MCA cost	F L3 M

	Difference = R375 – R215 ✓MA = R160 Valid statement ✓J	1MA subtraction 1J justification (5)	
9.2.6	R3,85 : R21 ✓MA R3,85 R3,85 1 : 5,659 ✓CA 1 : 5,7 ✓R	1 MA correct ratio order 1CA simplification 1R rounding (3)	F L2 E
			<b>[30]</b>
<b>QUESTION 10</b>			
<b>QUES</b>	<b>SOLUTION</b>	<b>EXPLANATION</b>	<b>T&amp;L</b>
10.1.1	It means Thabo will be charged the full value of R1 00 for every amount withdrawn. ✓✓E	2E correct explanation (2)	F L1 E
10.1.2	R0,00 ✓✓A	2A correct answer (2)	F L1 E
10.1.3	<div style="text-align: center;">  </div> ✓MA      ✓MCA Total bank fees = (R10 × 2) + (R10 × 6) + R10 = R20 + R60 + R10 ✓S = R90 ✓CA	1MA multiply R10 by 2 1MCA multiply by 6 1S simplification 1CA simplification (4)	F L2 M
10.1.4	<div style="text-align: center;">  </div> ✓MA Amount withdrawn = R95,50 – R5,50 = R90 × $\frac{100}{2,25}$ = R4 000	1MA subtracting R5,50 1MA dividing by 2,25%  1A simplification (3)	F L4 M
10.1.5	Tyme Bank, there are NO bank charges paid on the bank withdrawals. ✓✓O	2O explanation (2)	F L4 E
10.1.6	<div style="text-align: center;">  </div> ✓MA FNB = R10 × 2 + R14 = R34 ✓CA Capitec = R10 × 3 = R30 ✓A Difference = R34 – R30 ✓MA = R4 ✓CA	1MA add R14 1CA bank fees  1A bank fees 1MA subtraction 1CA answer (5)	F L3 D
10.2.1	$\frac{121,456}{100}$ ✓C R1,21456 ✓A	1C conversion  1A answer <b>AO-PR</b> (2)	F L1 E
10.2.2	Cost = R1,21456 × 50 kWh ✓MCA = R60, 728 = R60,73 ✓CA	<b>CA from 10.2.1</b> 1MCA multiplying by 50 1CA answer (2)	F L2 E

10.2.3	Total kWh = 50kWh + 250kWh + 170 kWh ✓MA = 470 kWh ✓A	1MA adding correct values 1A answer (2)	F L2 M
10.2.4	Cost = R60,73 + (250 × R1,51287) + (170 × R2,0778) + R60 ✓M = R60,73 + R382,175 + R353,226 + R60 ✓MA = R856,13 ✓CA	1M multiplying with correct rates 1MA adding surcharge 1S simplification 1CA answer (4)	F L3 M
10.2.5	VAT = $\frac{15}{115} \times R60$ ✓MA = R7,826 = R7,83	1MA multiply 15 by R60 1MA dividing by 115 (2)	F L2 E
10.2.6	<ul style="list-style-type: none"> <li>To improve infrastructure/For upgrades/ ✓✓O</li> <li>For maintenance/recover loss cost ✓✓O</li> <li>Maintain municipality revenues generation</li> </ul>	2O opinion (2)	F L4 D
			[34]

**QUESTION 11 [39]**

11.1.1	Mauritian rupee ✓✓RT	2RT Answer (2)	F L1 E
11.1.2	British Pound, Swiss Franc, Euro ✓✓RT	2RT Answer (2)	F L1 E
11.1.3	Bank Selling Rate is the rate at which banks sell foreign currency to a customer. ✓✓O Bank Buying Rate is the rate at which banks buy back foreign currency from a customer ✓✓E	2O Answer (4)	F L1 M
11.1.4	Foreign currency spread = 0,2099 – 0,2010 ✓MA = 0,0089 ✓A	1MA subtracting correct values 1A Answer (2)	F L2 E
11.1.5	The bank sells the currency at a higher rate than which it buys it back because it needs to make a profit. ✓✓O	2O correct explanation (2)	F L4 M



11.1.6	Both currencies are of equal strength. In other words, 1 Namibian dollar is equal to 1 ZAR✓✓O	2O correct explanation (2)	F L1 E
11.1.7	<p>Daniel used the bank buying rate instead of the bank selling rate to convert rands to Singapore dollars. ✓E</p> <p>He divided instead of multiplying to convert rands into Mauritian rupees. ✓O</p> <p>Number of SGD = <math>R25\,000 \div 14.1844</math>✓MA = SGD 1762,499648✓A</p> <p>Number of Mauritian rupees = <math>R25\,000 \times 2.6168</math>✓MA = MUR 65420✓A</p> <p>Number of times = <math>\frac{65420}{1\,762\,499\,648}</math>✓MCA = 37,11773791✓CA</p> <p>Therefore, the Mauritian rupee is more than 37 times better value for money than the Singapore dollar. ✓✓O</p>	<p>1O correct error for SGD</p> <p>1O correct error for MUR</p> <p>1C dividing by 14,1844</p> <p>1A correct value for SGD</p> <p>1C multiplying by 2.6168</p> <p>1A correct value for MUR</p> <p>1MCA dividing MUR by SGD</p> <p>1CA correct number of times</p> <p>2O correct explanation</p> <p><b>Accept 37,1222193</b> (10)</p>	F L4 D
11.2.1	<p>1, 558 billion = <math>1,558 \times 1\,000\,000\,000</math>✓C = 1 558 000 000✓A</p>	<p>1C multiplying by 1 billion</p> <p>1A correct answer (2)</p>	F L2 M
11.2.2	<p>Amount earned = <math>\\$3 \times 1,024</math>✓RT ✓MA = \$3, 072✓A</p>	<p>1RT \$3</p> <p>1MA multiplying \$3 by 1,024</p> <p>1A correct answer (3)</p>	F L2 M
11.2.3	<p>Amount = <math>\\$3,072 \times 18,3294</math>✓MA = R56,3079168 = R56,31✓CA</p>	<p><b>CA from 11.2.2</b></p> <p>1MA multiplying \$3, 072 by 18,3294</p> <p>1CA answer (2)</p>	F L2 M
11.2.4	<p>Amount = <math>\\$3 \times 18,3294</math>✓C = R54,9882✓A</p> <p>Difference = <math>R54,9882 - R45</math>✓MCA</p>	<p>1C multiplying \$3 by 18,3294</p> <p>1A answer</p> <p>1MCA subtracting R45 from</p>	F L3 M

	$= R9,9882$ $= R9,99 \checkmark CA$	R54,9882 1CA correct answer (4)	
11.2.5	$\$85\,000\,000: R1,558\text{ billion} \checkmark RT$ $\$85\,000\,000: R\,1\,558\,000\,000 \checkmark CA$ Exchange rate = $\frac{1\,558\,000\,000}{85\,000\,000} \checkmark MCA$ $\$1 = R18,32941176 \checkmark CA$	<b>CA from 1.2.1</b> 1RT identifying the correct values 1CA rands in billions 1MCA dividing correct values 1CA correct answer (4)	F L3 M
		<b>[39]</b>	
<b>QUESTION 12 [26]</b>			
12.1.1	Increase in the cost of the MRI scanner from year to year $\checkmark \checkmark A$	2A correct explanation (2)	F L1 E
12.1.2	2023 $\checkmark \checkmark RT$	2RT correct answer (2)	F L1 E
12.1.3	False. $\checkmark A$ Prices were lower in 2020 compared to 2019 owing to deflation $\checkmark \checkmark O$	1A False 2 correct explanation (3)	F L1 E
12.1.4	Expected cost = $\text{¥}28\,000\,000 \div 1,02 \checkmark \div 1,032 \checkmark$ $= \text{¥}26\,599\,787,2 \checkmark$ It did not exceed $\text{¥}26\,000\,000$	1MA dividing by 1,02 1MA dividing by 1,032 1CA answer (3)	F L3 M
12.1.5	Difference = $0.8\% \checkmark RT - (-0.1) \checkmark MA$ $= 0,9\% \checkmark A$	1RT 0.8% 1MA subtracting -0.1% 1A answer (3)	F L2 M
12.1.6	Expected cost = $\text{¥}28\,000\,000 \times 1,018 \checkmark MA$ $\times 1,022 \checkmark MA$ $= \text{¥}29\,131\,088 \checkmark CA$	1 MA multiplying by 1,018 1 MA multiplying by 1,022 1 CA Answer (3)	F L3 M

12.1.7	$\text{¥}30\,000\,000 - \text{¥}29\,131\,088 \checkmark \text{MA}$ $= \text{¥}868\,912 \checkmark \text{CA}$ The MRI is within the hospital's budget $\checkmark \text{J}$	<b>CA from 2.1.6</b> 1MA subtracting correct values 1CA answer 1J Justification (3)	F L4 D
12.1.8	Market volatility could lead to inflation increasing significantly, pushing up the price by a large amount. $\checkmark \checkmark \text{O}$ Inflation for upcoming years is just a projection/estimation so if the actual inflation is higher, the costs could exceed the amount budgeted. $\checkmark \checkmark \text{O}$	2O correct risk 2O correct risk (4)	F L4 M
12.1.9	$\text{Probability} = \frac{1 \checkmark \text{RT}}{6 \checkmark \text{RT}} \times 100$ $= 16,67\% \checkmark \text{CA}$	1RT numerator 1RT denominator 1CA answer (3)	F L2 M
		<b>[26]</b>	

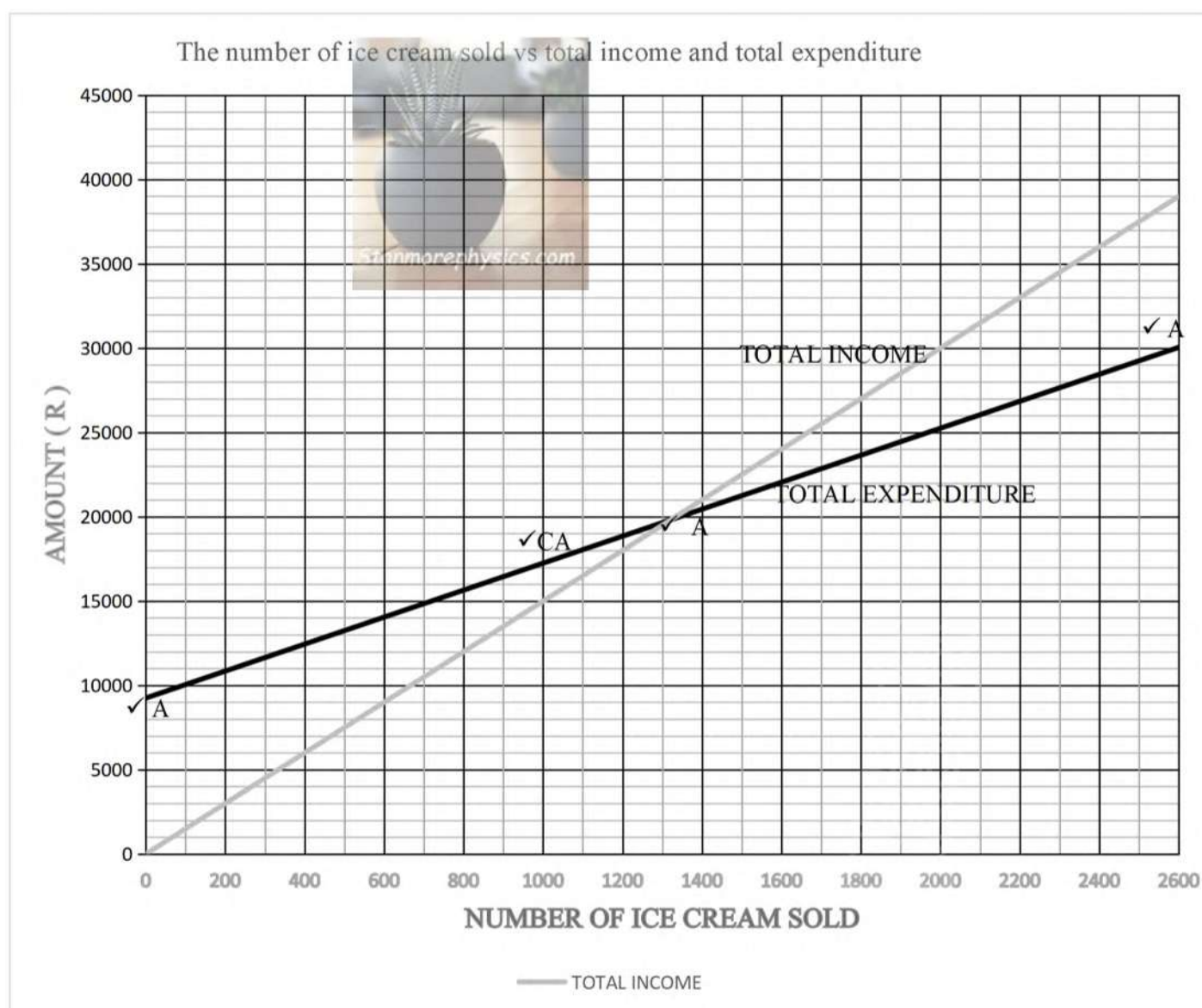
**QUESTION 13**

Question	Solution	Explanation	T&L
13.1	$\checkmark \checkmark \text{MA}$ $\text{R}8\,392,40 + \text{R}9\,250$ $\text{R}17\,642,50$	2MA adding correct values. (2)	F L1 E
13.2	Because Nozipho has to pay for the loan that she took to buy the equipment for her business $\checkmark \checkmark \text{O}$	2O for reasoning (2)	F L4 E
13.3	$\checkmark \text{MA}$ $\text{Profit} = \text{R}14\,250 - \text{R}17\,647,50$ $= -\text{R}3\,397,50 \checkmark \text{A}$ The value of profit is negative which shows loss $\checkmark \text{A}$ , he statement was invalid $\checkmark \text{O}$	1MA subtracting correct values 1A answer 1A profit/loss 1O conclusion (4)	F TL4 E
13.4	$= \frac{14\,250}{15} \checkmark$ $= 950 \checkmark \text{A}$	1MA dividing 14 250 by 15 1A correct answer (2)	F TL1 M
13.5	$\checkmark \text{MCA}$ $\text{Production costs for 950 ice cream} = 950 \times 8$ $= \text{R}7\,600 \checkmark \text{CA}$ $\checkmark \text{M}$ $\text{Remaining amount} = \text{R}8\,392 - \text{R}7\,600$ $= \text{R}792 \checkmark \text{CA}$	<b>CA from 1.4</b> 1 MCA multiplying by 8 1 CA answer 1M subtracting values 1CA for answer (4)	F TL3 E
13.6	$\text{A} = 300 \times 8 = 11\,650 \checkmark \text{A}$ $\checkmark \text{MA} \quad \checkmark \text{A}$ $\text{B} = 3000 \div 15 = 2\,000 \text{ or } 25\,250 - 9\,250 = 16\,000 \div 8$ $= 2\,000$ $\text{C} = 0 \checkmark \text{A}$ $\text{D} = 1000 \times 15 = 15\,000 \checkmark \text{A}$	1A value of A 2A value of B 1A value of C 1A value of D (5)	F TL2 E



13.7	SDS	1A starting point (0; 9 250) 1A point (2 400; 28 450) 1A break-even point 1CA joining any two correct points 1A labelling the graph (5)	F TL2 D
13.8	Approximately 1 300 ice cream ✓✓RT	2 RT reading from the graph (2)	F TL1 E
13.9	1. increasing the selling price. ✓A 2. reducing the wage amount ✓A ANY other valid points	1O opinion 1O opinion (2)	F TL4 E

## ANNEXURE A



## QUESTION 14

Question	Solution	Explanation	T&L
14.1	<b>2024</b> $\checkmark\checkmark$ MA $R29\,660 - R23\,687,05$ $R5\,972,95$ <b>2025</b> $\checkmark\checkmark$ MA $R52\,900 - R43\,708,05$ $R9\,191,95$	 2MA subtracting correct values  2MA subtracting correct values	F L2 E
14.2	New registration : $1,06 \times 34\,000 = R36\,040\checkmark$ A Late registration : $1,06 \times 14\,400 = R15\,264\checkmark$ A Car hire : $1,06 \times 4\,500 = R4\,770\checkmark$ A Gross profit : $= R56\,074\checkmark$ CA Total Expenses : $1,06 \times 43\,708,05 = R46\,330,33\checkmark$ CA Operating profit : $R56\,074 - R46\,330,33 = R9\,743,47\checkmark$ CA Current operating profit = $R9\,191,95 \times 1,06 = R9\,743,47\checkmark$ A The statement is valid $\checkmark$ O	1A answer 1A answer 1A answer 1CA answer 1CA answer 1CA answer 1A answer 1O conclusion	F L4 E
14.3.1	$\checkmark$ A Option A = $8 \times 150 = R1200\checkmark$ CA  Option B = $10 \times 1\,350 = R13\,500\checkmark$ A $\checkmark$ MCA TOTAL Amount = $1\,200 + 13\,500 = R14\,700\checkmark$ CA	1A for 8 1CA answer  1A correct answer  1MCA adding the values 1CA answer	F TL3 E
14.3.2	$\checkmark$ MA Option B = $\frac{15}{100} \times 13\,500 = R2\,025\checkmark$ A Option A = $\frac{20}{100} \times 1\,200 = R240\checkmark$ A	1MA multiplying 15% by 13 500 1A correct answer  1A correct answer	F TL1 M
14.4.1	60 lesson = appr. $R7500\checkmark\checkmark$ RT	1RT reading from the graph	F TL1 E
14.4.2	Because you get the highest salary even if you didn't teach any learner drive. $\checkmark\checkmark$ O	1O opinion	F TL4 E
14.4.3	$\checkmark$ A $\checkmark\checkmark$ A Income = $2\,000 + 50 \times \text{no. of lessons}$	1A value of 2 000 2A value of 50	F TL2 D
14.4.4	Option A = $R1\,400\checkmark$ RT Option B = $R2\,000\checkmark$ RT Option C = $R3\,500\checkmark$ RT	1RT reading from the graph 1RT reading from the graph 1RT reading from the graph	F TL1 E
14.4.5	$\checkmark$ O $\checkmark$ J Option C, he will be able to budget OR Any other option with valid reason	1Q option 1J justification	F TL4 E

**QUESTION 15 [40 MARKS]**

Ques	Solution	Explanation	T/L
15.1.1	Cost Price is the total expense of acquiring and item. ✓ Selling Price is the price at which the item is sold to the customer. ✓	2A explanation	F L1 E
15.1.2	R3 000 × 2 ✓MA R6 000 ✓A  OR R3 000 + R3 000 ✓MA R6 000 ✓A	1 MA Multiplying by 2 1A Answer  1 MA Adding R3000 1A answer	F L2 E
15.1.3	✓MCA R6 000 + R2 500 ✓M R8 500 ✓A	1MCA question 15.1.2 1M adding R@ 2 500 1CA answer	F L2 M
15.1.4	<i>TOTAL MONTHLY COST = 8 500 + 950 × n</i> ✓✓	2A correct equation	F L2 M
15.1.5	8 500 + 950 × 4 ✓MCA 8 500 + 3 800 ✓SF R12 300 ✓CA	1 MCA question 15.1.4 1SF substitution 1CA answer	
15.2.1	The point in which the total monthly cost has been covered by the sales of goats ✓✓A OR Where the total cost and income received by Mr Kheswa are equal. ✓✓A	2O opinion	F L2 E



15.2.2	<p>Value B Income = <math>1\,800 \times 6</math> ✓MA  <math>= R10\,800</math> ✓A</p> <p>Value C Income = <math>1\,800 \times n</math>  <math>54\,000 \div 1\,800 = n</math> ✓MA  <math>n = 30</math> ✓A</p>	<p>1MA multiplying by 6  1A answer</p> <p>1MA dividing by 1 800  1A answer</p>	<p>F  L3  E</p>
15.2.3	<p>Income from 14 goats = <math>1\,800 \times 14</math> ✓MA  <math>= R25\,200</math> ✓A</p> <p>cost for 14 goats = <math>2\,500 + 950 \times 14</math>  <math>= 15\,800</math> ✓A</p> <p>Profit = <math>25\,200 - 15\,800</math>  <math>= R9\,400</math> ✓CA</p> <p>Income from 9 goats = <math>1\,800 \times 9</math> ✓MA  <math>= R16\,200</math> ✓A</p> <p>cost for 9 goats = <math>2\,500 + 950 \times 9</math>  <math>= R15\,550</math> ✓A</p> <p>Profit = <math>16\,200 - 15\,550</math>  <math>= R650</math> ✓CA</p> <p><math>\frac{650}{9\,400} \times 100</math> ✓MA  6,9% ✓CA  claim is valid ✓O</p>	<p>1MA multiplying by 14  1A answer income  1A answer cost  1CA answer  1MA multiplying by 9  1A answer income  1A answer cost  1MA %concept  1CA answer  1O opinion</p>	<p>F  L4  D</p>

15.2.4	<p>MR KHESWA'S BUSINESS</p>	<p>3A any 3 points plotted correct</p> <p>1A joining points</p>	
15.2.5	10 : R18 000 ✓✓A	2A answer	F L2 M
15.2.6	<p>Income = <math>1\,800 \times 15</math> ✓MA = R27 000 ✓A</p> <p>Total cost = <math>8\,500 + 950 \times 15</math> ✓MA = <math>8\,500 + 14\,250</math> = R22 750</p> <p>Profit = <math>27\,000 - 22\,750</math> ✓MA = R4 250 ✓CA</p> <p>invalid ✓O</p>	<p>1MA multiplying by 15</p> <p>1A answer</p> <p>1S simplifying</p> <p>1MA subtracting correct values</p> <p>1CA answer</p> <p>1O opinion</p>	F L4 M
		[40]	

**QUESTION 16 [30 MARKS]**

Ques	Solution	Explanation	T/L
16.1	Rent ✓✓A	2A answer ACCEPT R3 000 (2)	F L1 E
16.2	Price per metre = $R2\ 000 \div 50m$ ✓MA $= R40/m$ ✓A	1MA dividing by 50 1A answer (2)	F L1 M
16.3	✓RT $R2\ 000 \div 20$ people ✓MA R100	1RT correct value of R2 000 1MA dividing by 20 (2)	F L2 E
16.4	INCOME = $R350 \times n$ ✓✓A	2A correct equation (2)	F L2 E
16.5	Value A $= R1\ 500 + R100 \times 0$ ✓MA $= R1\ 500$ ✓A Value B $2\ 100 = 350 \times N$ ✓SF $2\ 100 \div 350 = N$ ✓MA $N = 6$ ✓A  OR $2\ 100 = 1\ 500 + 100 \times N$ $2\ 100 - 1\ 500 = 100N$ ✓SF $600 \div 100 = N$ ✓MA $N = 6$ ✓A  Value C $350 \times 20$ ✓MA	1MA multiplying R100 by 0 1A answer  1SF correct substitution 1MA dividing by 350 1A answer  1SF correct substitution 1MA dividing by 100 1A answer  1MA multiplying by 20 1A answer (7)	F L3 M



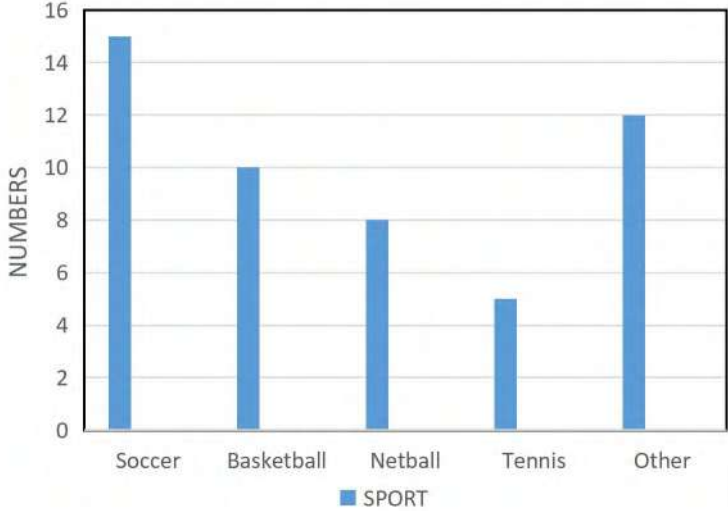
	R7 000 ✓A		
16.2.1	Where the of fabric has been covered by the sales of garments ✓✓A	2A correct definition (2)	F L2 M
16.2.2	6 garments ✓✓A	2A answer (2)	F L1 E
16.2.3	Graph starting at 0 to R7 000 ✓✓A OR Dotted line graph ✓✓A	2A answer (2)	F L2 M
16.2.4	20 people × 5 ✓MA 100 people ✓A INCOME = 350 × 100 = R35 000 ✓CA COST = 1 500 + 2 000 × 5 = R11 500 ✓A PROFIT = 35 000 – 11 500 = R23 500 ✓CA Valid ✓O	1MA multiplying by 5 1A number of people  1CA income  1A cost 1CA answer 1O opinion (6)	F L4 M
16.7	$\% = \frac{\text{new price} - \text{old price}}{\text{old price}} \times 100$ ✓SF $\% = \frac{R400 - R350}{R350} \times 100 \quad \checkmark \text{MA}$ $= 14,285714 \quad \checkmark \text{CA}$ $= 14,3\% \quad \checkmark \text{R}$	1SF correct substitution 1MA % concepts 1CA answer 1R rounding (4)	F L3 M

### QUESTION 17

QUE	SOLUTION	EXPLANATION	T&L
17.1.1	What is your favourite food in the school tuckshop? ✓✓A	2A correct question (2)	L2 DH E
17.1.2	Sample Question (b) Asking a random sample of learners from all classes. ✓A This approach ensures a diverse range of perspective and reduces biasness. ✓✓O	1A correct question  2O justification (3)	L4 DH E
17.2.1	Question (a)✓A  This question requires the respondent to just tick the response. ✓✓O <b>OR</b> It is not time consuming.✓✓O	1A correct question  2O justification  2O justification (3)	L4 DH E

### QUESTION 18

QUE	SOLUTION	EXPLANATION	T&L
18.1.1	<p>Tally is a simple method of recording data on number of different types of fruit using tally marks to represent frequencies or counts of type of fruit within specific categories. ✓✓O</p> <p><b>OR</b></p> <p>Tally is a form of used for counting total number of different types of fruit. ✓✓O</p> <p><b>OR</b></p> <p>Tally is a form of numeral used for summation of total number of different types of fruit. ✓✓O</p>	<p>2O explanation</p> <p>(2)</p>	L1 DH E
18.1.2	<ul style="list-style-type: none"> <li>Apples✓A</li> <li>Bananas✓A</li> <li>Oranges✓A</li> <li>Mangoes✓A</li> <li>Grapes✓A</li> </ul>	<p>1A Apple</p> <p>1A Banana</p> <p>1A Orange</p> <p>1A Mango</p> <p>1A Grapes</p> <p>(5)</p>	L2 DH M
18.2.1	<p>A = ////✓✓A</p> <p>B = 2✓✓A</p> <p>C = Oranges✓✓A</p>	<p>2A correct value for A</p> <p>2A correct value for B</p> <p>2A correct value for C</p>	L2 DH E
18.2.2	<p>Apples✓✓RT</p> <p>Bananas✓✓RT</p>	<p>1 RT Apples</p> <p>1 RT Bananas</p> <p>(6)</p>	L2 DH


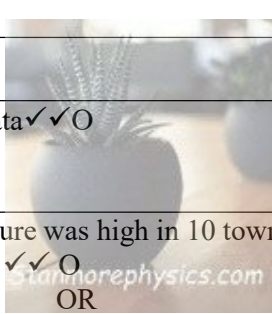
			E												
18.2.3	Categorical data✓A Categorical data is usually associated with words.✓✓O	1A type of data 2O explanation (3)	L4 DH E												
18.2.4	✓A The sample was not properly chosen. Given the sample size of 14 learners compared to the entire school population of 500 learners, conclusions may not be representative or reliable due to potential bias of the small sample.✓✓O  OR The sample size is too small Conclusions may not be representative or reliable due to potential bias of the small sample.✓✓O	1A correct choice 2O explanation  (3)	L4 DH E												
18.3.1	Total 50 ✓✓A	2A correct answer (2)	L1 DH E												
18.3.2	✓A P(netball) = 8 ÷ 50 = 0,16 ✓A	1 MA dividing correct values 1 A correct answer (2)	L1 DH E												
18.3.4	<div><p>DIFFERENT TYPES OF SPORTS</p><table><thead><tr><th>SPORT</th><th>NUMBERS</th></tr></thead><tbody><tr><td>Soccer</td><td>15</td></tr><tr><td>Basketball</td><td>10</td></tr><tr><td>Netball</td><td>8</td></tr><tr><td>Tennis</td><td>5</td></tr><tr><td>Other</td><td>12</td></tr></tbody></table></div> <div>2A labelling independent and dependant variables  1A soccer bar 1A basketball bar 1A Netball bar 1A Tennis bar 1A Other  (7)</div>		SPORT	NUMBERS	Soccer	15	Basketball	10	Netball	8	Tennis	5	Other	12	L3 DH M
SPORT	NUMBERS														
Soccer	15														
Basketball	10														
Netball	8														
Tennis	5														
Other	12														
18.3.5	✓RT $\frac{5}{50} \times 100\%$ ✓A ✓RT  = 10% ✓CA	1RT correct numerator 1A percentage concept 1RT correct denominator  1CA answer (4)	L2 DH M												



18.3.6	✓RT✓RT 15 : 10 3 : 2✓A	1RT numerator 1RT denominator 1A answer (3)	L2 DH M
18.3.7	<ul style="list-style-type: none"> <li>Swimming✓A</li> <li>Chess✓A</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>Athletics✓A</li> <li>Rugby✓A</li> </ul> <b>OR</b> <b>Any other relevant answer</b>	1A sport one 1A mentioning the second sport 1A sport one 1A mentioning the second sport (2)	L1 DH E
			[43]

**QUESTION 19**

	SOLUTION	Explanation	
19.1.	29%, 46%, 52%, 65%, 65%, 77%, 81%, 87%, 87%, 94% ✓✓RT	2RT reading correct values (2)	L2 DH E
19.2.	Range = 94% - 29% ✓✓MA = 65%✓A	1MA for subtracting correct values 1A correct answer  (3)	L2 DH E
19.3.	Median = $\frac{65\% + 77\%}{2}$ ✓✓MA = 71% ✓A	2MA for adding correct values and divide by 2. 1A correct answer.  (3)	L3 DH M
19.4.	Q1 = 52%✓✓RT  Q3 = 87% ✓✓RT	2RT identifying Q1  2RT identifying Q3  (4)	L3 DH E
19.5.	✓RT IQR = 87% - 52%✓MA  = 35%✓A	1RT reading correct values 1MA subtracting correct values  1A answer (3)	L3 DH M
19.6.	Newcastle and Ladysmith ✓✓RT  Both towns shows low temperature on the day. ✓✓O	2RT reading both towns.  2O correct explanation  (4)	L4 DH M
19.7.	Top 5 town = 77% + 81% + 87% + 87% + 94%✓✓MA = 432 %	2MA adding all 5 correct towns.  1MA finding total	L3 DH D

		 $\begin{aligned}\text{Total} &= 432\% + 29\% + 46\% + 52\% + 65\% \\ &\quad + 65\% \\ &= 689\% \checkmark \text{MA} \\ \frac{432}{689} \times 100\% &\checkmark \checkmark \text{MA} \\ &= 62,69\%\end{aligned}$	2MA percentage concept  (5)	
	19.8.	19, 17, 17, 18, 23, 19, 19, 21, 21, 16 $\checkmark$ RT $\text{Probability} = \frac{3}{10} \times 100\% \checkmark \text{MA}$ $= 30\% \checkmark \text{A}$	1RT reading high temperatures. 1MA percentage concept.  1A answer.  (3)	L3 P E
<b>QUESTION 20</b>				
	20.1.	Numerical data $\checkmark \checkmark$ O 	2O Answer  (2)	
	20.2.	The temperature was high in 10 towns on the day. $\checkmark \checkmark$ O OR All town experience warm temperature $\checkmark \checkmark$ O	2 opinion  (2)	L4 DH M
	20.3.	Continuous data $\checkmark \checkmark$ RT  Temperature is measured. $\checkmark \checkmark$ O	2RT correct answer 2O opinion  (4)	L4 DH M
	20.4.	23, 24, 19, 18, 19, 21, 19, 16, 19, 20 Mode = 19 $\checkmark \checkmark$ RT	2RT correct mode  (2)	L2 DH E
	20.5.	16, 18, 19, 19, 19, 19, 20, 21, 23, 24 $\checkmark \checkmark$ RT  $\begin{aligned}\text{Mean} &= \frac{16 + 18 + 19 + 19 + 19 + 19 + 20 + 21 + 23 + 24}{10} \\ &= \frac{198}{10} \checkmark \checkmark \text{MA} \\ &= 19,8 \checkmark \text{A}\end{aligned}$	1RT reading correct values  2MA concept of the mean  1A answer  (5)	L3 DH M


	20.6	$Q1 = 19 \checkmark RT$ $Q2 = 19 \checkmark RT$ $Q3 = 21 \checkmark RT$	1RT reading Q1 1RT reading Q2 1RT reading Q3 (3)	
	20.7.	4, 8, 9, 10, 10, 11, 13, 14, 14, 15 $\checkmark RT$ $Median = \frac{10+11}{2} \checkmark \checkmark MA$ $= 10,5 \checkmark A$ <b>Q1 = 9, Q3 = 14</b> $IQR = 14 - 9 \checkmark \checkmark MA$ $= 5 \checkmark A$	1RT reading correct values 2MA concept of median 1A correct answer  2MA subtracting correct values 1A correct answer (7)	
<b>Question 21</b>				
Ques	solution		explanation	T & L
21.1.1.	Histogram. $\checkmark \checkmark RT$		2RT reading from graph (2)	DH TL1 E
21.1.2.	2023. $\checkmark \checkmark RT$		2RT reading from graph (2)	DH TL1 E
21.1.3.	Yes, $\checkmark A$ easy to read/interpret. $\checkmark \checkmark O$		1A answer 2O opinion (3)	DH TL3 M
21.1.4.	Increasing. $\checkmark \checkmark O$		2O explanation (2)	DH TL3 E



21.1.5.	$100\% + 6,9\% = 106,9\%$ $106,9 \div 100 = 1,069 \checkmark M$ $R4\ 688,81 \div 1,069 \checkmark MA$ $= R5\ 012,34 \checkmark A$	1M simplifying % 1MA dividing by 1,033 1A answer (3)	F TL3 M
21.2.1.	Range = highest value – lowest value $25 = A - 25 \checkmark M$ $30 = A \checkmark A$	1M substitution 1A answer (2)	DH TL2 M
21.2.2.	$30 : 9 \checkmark M$ $10 : 3 \checkmark A$	1M writing correct order 1A answer (2)	DH TL1 M
21.2.3.	Bar graph. $\checkmark \checkmark O$	2O explanation (2)	DH TL3 M
21.2.4.	$P = \frac{30+18}{100} \checkmark \checkmark MA$ $= 0,48 \checkmark A$	1MA numerator 1MA denominator 1A answer (2)	P TL2 M
21.2.5.	Plant your own garden. $\checkmark \checkmark O$	2O opinion (2)	DH TL4 M
21.2.6.	$5,9,15,18,23,30 \checkmark MA$ $= \frac{15+18}{2} \checkmark MA$ $= 16,5 \checkmark A$	1MA arranging data 1MA dividing by 2 1A answer (3)	DH TL2 M
			[25]



**Question 22**

Ques	Solution	explanation	T&L
22.1.1.	Compound Bar graph. ✓ ✓ RT	2RT reading from graph (2)	DH TL1 E
22.1.2.	91%, 89,5%, 88,4%, 87,5%, 86,6%, 85,1%, 84,9%, 84,4%, 84,2% ✓ ✓ RT	2RT reading from graph (2)	DH TL1 M
22.1.3.	North West or NW. ✓ ✓ RT	2RT reading from graph (2)	DH TL1 E
22.1.4.	Mean = $91 + 89,5 + 88,4 + 87,5 + 86,6 + 85,1 + 84,9 + 84,2$ ✓ M $= 782,1 \div 9$ ✓ MA $= 86,9$ ✓ A	1M adding values 1MA dividing by 9 1A (2)	DH TL3 M
22.1.5.	$Q1 = \frac{76,54 + 79,54}{2}$ $= 78,04$ ✓ MA $IQR = Q3 - Q1$ $= 85,87 - 78,04$ ✓ MA $= 7,83$ ✓ A valid ✓ O	$Q3 = \frac{85,38 + 86,36}{2}$ $= 85,87$ ✓ MA 2MA values for Q1 & Q3 1MA substitution 1A answer 1O opinion (5)	DH TL4 D
22.2.1.	Water and Electricity. ✓ ✓ RT	2RT reading from graph (2)	DH TL1

			E
22.2.2.	$32 : 10 \checkmark \text{MA}$ $16 : 5 \checkmark \text{A}$	1MA values correct order 1A simplified ratio (2)	DH TL2 M
22.2.3.	$100\% - 5\% - 8\% - 10\% - 5\% - 10\% - 31,8\% - 10\%$ $- 10\% \checkmark \text{MA}$ $= 10,2\% \checkmark \text{A}$	1MA subtracting correct values 1A answer (2)	DH TL2 E
22.2.4.	$R3\ 285\ 000 \checkmark \checkmark \text{A}$ 	2A writing correct value (2)	DH TL1 M
22.2.5.	$10,2\% \times R3\ 285\ 000$ $= R335\ 000 \checkmark \text{M}$ $2\% \times R335\ 000 \checkmark \text{MA}$ $= R6\ 700 \checkmark \text{CA}$	1M calculating amount of other 1MA simplification 1A answer (2)	F TL2 D
22.2.6.	$R335\ 000 - (3\% \times R335\ 000) \checkmark \checkmark \text{M}$ $= R335\ 000 - R10\ 050 \checkmark \text{MA}$ $= R324\ 000 \checkmark \text{A}$ Valid $\checkmark \text{O}$	2M substitution 1MA subtracting 3% 1A answer 10 (2)	F TL3 M
			[30]
<b>QUESTION 23</b>			
Q	Solution	Explanation	T&L
23.1.1	3 year $\checkmark \checkmark \text{A}$	2 A correct answer (2)	M L1 E

23.1.2	50 ✓✓ RT	2 RT correct answer (2)	M L1 M
23.1.3	Contract A. ✓ A At 60 minutes, the total cost will still be less than that of contract B which is R500. ✓✓ E	1 A correct answer 2 E correct reason (3)	M L4 M
23.1.4	80 minutes ✓, R500 ✓ RT	2 RT correct values (2)	M L2 M
23.1.5	It's the point on the graphs where both contracts A and B are using 80 minutes and the total cost for each contract is R500. ✓✓ A  <b>OR</b> It's the point on the graphs where both contracts intersect or cut, the cost for both contract A and B exactly the same. ✓✓ A	<b>CA from 1.1.4</b>  2 A correct answer  2 A correct answer (2)	F L2 M
23.1.6	Contract A: Contract B ✓ RT ✓ RT R750 : R500 ✓ MA 3 : 2 ✓ S	2 A correct answer  1 MA correct order 1 S for simplification (4)	M L3 M
23.1.7	The free minutes are being used so there are no charges incurred for using the free minutes, only the subscription cost. ✓✓ O	2 O correct explanation (2)	M L4 M
23.1.8	✓ A $P(\text{cost of R800}) = \frac{1}{2} \checkmark A$ $= 0,5 \checkmark CA$	1 A for correct numerator 1 A for correct denominator 1 CA for decimal form  <b>AO full marks</b> (3)	P L2 M



Q	Solution	Explanation	T&L
23.2.1	Inverse relationship. ✓A As the type-approval fuel consumption increase, the additional fuel consumption is decreasing. ✓✓E	1 A correct answer 2 E explanation (3)	M L4 M
23.2.2	Manufacturer A. ✓A Because the type-approval fuel consumption increase is almost the same as the additional fuel consumption. ✓✓E	1 A correct answer 2 E correct explanation (3)	DH L4 M
23.2.3	Graph B. ✓✓A 	2 A correct answer (2)	M L1 E
23.3.1	350cm ✓✓RT 	2 RT for correct answer (2)	DH L1 E
23.3.2	As the foot length of the elephant increases, the shoulder length also increase. ✓✓O  <b>OR</b> There is a positive relationship/correlation between the foot length and shoulder height of the elephant. ✓✓O	2 O correct explanation  2 O correct explanation (2)	M L4 M
23.3.3	Foot length, because the shoulder length depends on the foot length of the elephant. ✓✓O	2 O correct explanation (2)	M L4 M
			<b>[35]</b>
<b>QUESTION 24</b>			
Q	Solution	Explanation	T&L
24.1	\$ : R  ✓A  \$1 : R17,925 ✓A	1 A correct values 1 A correct order (2)	M L2 M

24.2	<p>Cost in dollars \$</p> <p>\$1 : R17,74</p> <p>✓ MA</p> <p>\$1 500 x R17,74 = R26 610 ✓ CA</p> <p>Cost in Chinese Yuan ¥</p> <p>¥1 : R 4,72</p> <p>✓ MA</p> <p>¥4 500 x R4,72 = R 21 240 ✓ CA</p> <p>The part will be cheaper in the US. ✓ O</p>	<p>1 MA multiplying by R17,74</p> <p>1 CA for correct answer</p> <p>1 MA multiplying by R4,72</p> <p>1 CA for correct answer</p> <p>1 O for conclusion (5)</p>	<p>DH</p> <p>L4</p> <p>D</p>
24.3	<p>\$1 : R17,925 ✓ RT</p> <p>¥1 : R2,501 ✓ RT</p> <p>Less rands rands can buy more Chinese Yuan rands, however more rands are needed to buy one \$1.</p> <p>Therefore the rand had a higher buying power in China. ✓ O</p>	<p>2 RT correct exchange rates for both countries</p> <p>2 O for explaining less rands buy more Chinese yuan</p> <p>1 O for indicating high buying power in China. (5)</p>	<p>F</p> <p>L4</p> <p>D</p>
24.4	<p>The rand was gaining strength against the US dollar. ✓✓ E</p> <p>However the graph was reaching its lowest point before it started weakening against the dollar as the graphs changes direction. ✓ E</p> <p><b>OR</b></p> <p>The rand was appreciating in value against the US dollar. ✓✓ E</p> <p>However the graph was reaching its lowest point before it started weakening against the dollar as</p>	<p>2 E for correct explanation</p> <p>1 E for mentioning lowest point, and weakening of currency</p> <p>2 E for correct explanation</p>	<p>F</p> <p>L4</p> <p>D</p>

	the graphs changes direction. ✓ E	1 E for mentioning lowest point, and weakening of currency (3)	
24.5	On the 3 <sup>rd</sup> of July. ✓✓ A The rand was at its strongest value against the Chinese Yuan, therefore the was in a position to buy more foreign currency compared to other days. ✓✓ E	2 A correct answer  2 E for correct explanation (4)	F L4 M
			[19]

**QUESTION 25**

25.1.1	✓RT ✓RT Difference in weight = 11,4kg – 10,6kg ✓MA = 0,8kg✓A	1RT 11,4KG 1RT 10,6KG 1MA Subtraction 1A Correct answer (4)	M M L2
25.1.2	✓RT The weight of the girl at 12 months was on the 3 <sup>rd</sup> percentile. This ✓O is below the range of 5% to 95% for normal weight, therefore the girl was underweight. ✓✓O	1RT 3 <sup>RD</sup> Percentile 1O below normal weight 2O underweight (4)	M M L4
25.1.3	70cm ÷ 100 = 0,7m✓C ✓RT $\text{BMI} = \frac{12 \text{ kg}}{(0,7\text{m})^2} \checkmark \text{SF}$ = 24,49✓CA	1C Conversion 1RT 12kg 1SF correct substitution 1CA answer (4)	M M L3

25.2.1	Minimum value = 250✓A Quartile 1/Lower quartile = 350✓A Median/Quartile 2 = 450✓A Quartile 3/Upper quartile = 500✓A Maximum value = 550✓A	1A Minimum value 1A Quartile 1 1A Median 1A Quartile 3 1A Maximum value (5)	DH E L1
25.2.2	$\frac{\checkmark RT}{IQR} = \frac{\checkmark RT}{500 - 325} \checkmark SF$ $= 175 \checkmark A$	1RT 500 1RT 325 1SF Substitution 1A answer (4)	DH M L2
25.2.3	No. ✓O ✓O 75% of the 9 car brands sales in 2024 was greater than 75% of the 9 car brand sales in 2023. ✓O No. ✓O ✓O 50% of the 9 car brands sales in 2024 was greater than 50% of the 9 car brand sales in 2023. ✓O	1O No 1O 75% in 2024 greater than 75% in 2023 1O No 1O 50% in 2024 greater than 50% in 2023 (3)	DH D L4
25.3.1	$\frac{1117 \checkmark + P}{15} \checkmark = 80,8$ $P = 1212 - 1117 \checkmark$ $P = 95 \checkmark$	1A adding values 1A divide by 15 1 CA subtraction 1 CA answer (4)	DH H L3
25.3.2	$\frac{3}{15} \checkmark \times 100 = 20\% \checkmark$	1A correct fraction 1CA % (2)	P M L2
25.3.3	Median Class A = 88✓ Class B = 80✓ Class A has a higher median hence they performed better✓ OR Range Class A = 100 – 76 = 24✓	1RT median class A 1RT median class B 1Opinion OR 1M range class A 1 M range class B 1Opinion	DH M L3



	Class B = $100 - 68 = 32$ ✓ Class A has a lower range hence they performed better✓ Accept any other logical explanation	(3)	
			[33]

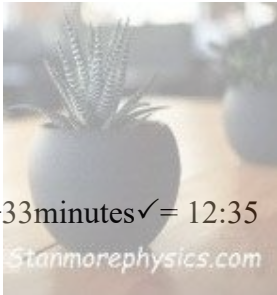
**Question 26**

26.1.1	4-5 yr✓✓RT	2RT reading correct values (2)	DH M L2
26.1.2	39 inches✓✓RT	2RT reading correct values (2)	DH M L2
26.1.3	5 <sup>th</sup> percentile ✓✓RT	2 RT reading correct values (2)	DH M L2
26.1.4	19 kg ✓✓RT	2 RT reading correct values (2)	DH M L2
26.1.5	a) $\frac{28}{1,18^2} = 20,1$ ✓	1 A correct mass 1 C height to m 1CA answer (3)	DH M L2
	b) being underweight can lead to various health conditions. Weakened immune system Not enough calorie and nutrient intake. Decreased muscle strength. ✓✓	2O (2)	DH M L4
26.1.6	137cm✓✓	2RT reading correct values (2)	DH M L4
26.1.7	90 <sup>th</sup> percentile. This will be classified as above average. They are greater than the 50 <sup>th</sup> percentile and closer to 100%.✓✓	2O (2)	DH M L4
26.2.1	2750 ✓✓RT	2RT Reading correct values (2)	DH E L1
26.2.2	✓RT ✓RT IQR = $3500 - 1450$ ✓SF = 2050✓A	2RT correct values 1SF correct substitution 1A answer (4)	DH M L2

		Allow leeway of 50	
26.2.3	<p>3 values. ✓A</p> <p>✓MA</p> <p><math>12 \div 2 = 6</math>. Therefore 6 values above median and 6 below.</p> <p>✓MA</p> <p><math>6 \div 2 = 3</math>, therefore 3 values above quartile 1, and 3 school below quartile 1.</p> <p><b>OR</b></p> <p>3 values. ✓A</p> <p>✓✓A</p> <p><math>12 \div 4 = 3</math>. Therefore, there are 3 values in each quartile</p>	<p>1A for 3</p> <p>1MA <math>12 \div 2</math></p> <p>1MA <math>6 \div 2</math></p> <p>1A for 3</p> <p>2MA <math>12 \div 4</math></p> <p>(3)</p>	DH D L3
26.2.4	<p>Company A the 12 monthly sales range = 5400 – 900 ✓RT</p> <p>4500 ✓A</p> <p>Company B the 12 monthly sales Range = 5650 – 375 ✓RT</p> <p>5185 ✓A</p> <p>Company A the 12 monthly sales range = 6250 – 2750</p> <p>3500 ✓A</p> <p>Since the difference in the range between the highest month sale and the lowest month sale is the smallest for Company C, it indicates that the 12 monthly sales were the most consistent. The Claim is invalid ✓O</p>	<p>1RT Correct Values</p> <p>1A answer</p> <p>1RT Correct values</p> <p>1A answer</p> <p>1RT Correct answer</p> <p>O Opinion</p> <p>(6)</p>	DH D L4
			[32]

**QUESTION 27**

Ques	Solution	Explanation	T/L
27.1			
27.1.1	12-hour format ✓✓	2A Correct answer (2)	ML1
27.1.2	13:14 ✓✓	2A correct (2)	ML1
27.1.3	<p>Difference = 8:13am – 7:35 am ✓✓</p> <p>= 38 minutes ✓</p>	<p>2RT, Subtracting correct values</p> <p>1A answer</p>	ML2



27.1.4	$^{\circ}\text{F} = (20^{\circ} \text{SF} \times 1,8) + 32$ $= 84,2^{\circ}\text{F} \checkmark \text{CA}$ $= 68^{\circ}\text{F} = 70^{\circ}\text{F} \checkmark \text{R}$	1SF, correct substitution 1CA, Simplification 1A, Rounding (3)	ML2
27.2			
27.2.1	Analogue $\checkmark \checkmark$	A, correct (2)	ML1
27.2.2	Five minutes past (after) twelve o'clock in the afternoon $\checkmark \checkmark$	2A, correct	ML1
27.2.3	12:05 $\checkmark \checkmark$	2MA,	ML1
27.2.4	27 123 km $\checkmark \checkmark$	1RT	ML1
27.2.5	Odometer reading = $27\,123 + 45 \checkmark$ $= 27\,168 \text{ km} \checkmark$	1 adding 1 answer	
27.2.6	50 km/h $\checkmark \checkmark$	2RT	ML2
27.2.7	$\text{duration} = \frac{\text{distance}}{\text{speed}} \checkmark$ $= \frac{45 \text{ km}}{80} \checkmark$ $0,5625 \text{ hours} \checkmark$ $33 \text{ minutes } 45 \text{ secs} \checkmark$ Arrival time = $12:05 + 33 \text{ minutes} \checkmark = 12:35$ Invalid claim $\checkmark$ 	1 formula 1 substituting 1 simplifying 1A minutes 1 addition 1O (6)	ML3
27.3			
27.3.1	24-hour format $\checkmark \checkmark$	2A correct answer	ML1
27.3.2	Is the time taken/ spent between departure and the arrival points $\checkmark \checkmark$	2A correct explanation	ML1
27.3.3	2 days $\checkmark \checkmark$	2RT	ML1
27.3.4	Duration = $19:40 \checkmark - 10:25 \checkmark = 9 \text{ h } 15 \text{ min} \checkmark$	2RT 1A	ML2
27.3.5	12:40 am $\checkmark \checkmark$	2RT	ML1
27.3.6	Duration = $19:40 - 13:55 =$ $5 \text{ hours } 45 \text{ min}$ $\text{distance} = \text{speed} \times \text{duration} \checkmark$ $= 80 \text{ kph} \times (5 \text{ hours } 45 \text{ min}) \checkmark$ $= 460 \text{ km} \checkmark$	1RT SUBTRACT 1A 1FORMULA 1SIMPLIFY 1A (5)	ML3
		[45]	

## QUESTION 28

Ques	Solution	Explanation	T/L
28.1			
28.1.1	Sugar in one 330 mL can of cola = <b>8.75 tsp</b> Sugar in two cans per day = $2 \times 8.75 = \mathbf{17.5} \checkmark$	1A multiplication 1A 1A grams per day	ML2

	<b>tsp/day✓</b> Convert to grams: $17.5 \text{ tsp} \times 4 \text{ g} = \mathbf{70 \text{ g/day}✓}$ Annual consumption = $70 \text{ g/day} \times 365 \text{ days} = \mathbf{25\,550 \text{ grams}✓}$	1A (4)	
28.1.2	Old intake (before change): <ul style="list-style-type: none"> <li>• TWO 240 mL cans of energy drink: → <math>2 \times 124 = 248 \text{ calories}</math></li> <li>• ONE 240 mL chocolate milk: → <math>116 \text{ calories}✓</math></li> <li>• ONE 330 mL can of Dry Lemon: → <math>168 \text{ calories}✓</math></li> </ul> Total (old): → $248 + 116 + 168 = 532 \text{ calories/day}$ ◇ New intake (after change): TWO 500 mL bottles of vitamin water: (Vitamin water 240 mL = 52 calories) 500 mL is about $2.08 \times 52 = 108.3 \text{ calories}$ $2 \times 108.3 = 216.6 \text{ calories}✓$ ONE 240 mL bottle of vanilla soy milk: $32 \text{ calories}✓$ ONE 330 mL can of diet cola: $0 \text{ calories}$ Total (new): $216.6 + 32 + 0✓ = 248.6 \text{ calories/day}✓$	(5)	ML3
28.1.3	$2 \times 240 \text{ mL energy drink} \rightarrow 2 \times 7.75 \text{ tsp} = 15.5 \text{ tsp}$ $1 \times 240 \text{ mL chocolate milk} \rightarrow 7.25 \text{ tsp}$ $1 \times 330 \text{ mL Dry Lemon} \rightarrow 10.5 \text{ tsp}✓$ Total old sugar intake: $15.5 + 7.25 + 10.5 = 33.25 \text{ tsp/day}✓$ New sugar intake (after change): $2 \times 500 \text{ mL vitamin water}$ (Vitamin water 240 mL = 3.25 tsp) $500 \text{ mL} \approx 2.08 \times 3.25 = 6.76 \text{ tsp}✓$ $2 \times 6.76 = 13.52 \text{ tsp}$ $1 \times 240 \text{ mL vanilla soy milk} \rightarrow 2 \text{ tsp}$ $1 \times 330 \text{ mL diet cola} \rightarrow 0 \text{ tsp}$ Total new sugar intake: $13.52 + 2 + 0 = 15.52 \text{ tsp/day}✓$		ML3


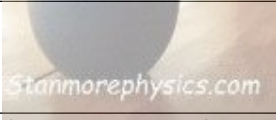


	$\text{percentage} = \frac{15.52}{33.25} \times 100 \checkmark$ $= 46.67\% \checkmark$ Invalid statement $\checkmark$		
28.2			(7)
28.2.1	$\text{cakes} = \frac{18}{6} \checkmark$ $= 3 \text{ cakes} \checkmark$	1MA division 1A (2)	ML2
28.2.2	$\text{Butter ounce} = \frac{100}{28.353} \text{ ounce} \checkmark$ $= 3.5273 \text{ oz} \checkmark$	1MA dividing 1A (2)	ML1
28.2.3	$\text{Milk in cups} = \frac{150 \text{ ml}}{250 \text{ ml}} \checkmark$ $= 0.6 \text{ cups} \checkmark$ $\frac{3}{5} \text{ cups} \checkmark$ 	1MA dividing 1A simplification 1A fraction (3)	ML2
28.2.4	$200 \text{ g} : 250 \text{ g}$ $\frac{200}{200} : \frac{250}{200} \checkmark$ $1 : 1.25 \checkmark$ 	1MA 1A (2)	ML2
28.2.5	$50 \text{ g} = 6$ $100 \text{ g} = \text{p} \checkmark$ $50 \text{ p} = 600$ $\text{P} = 12 \checkmark \text{ not enough} \checkmark$	1MA 1S 1A (3)	ML2
28.2.6	$\text{Stopping time} = 3(18+35+20) \checkmark + 9:00$ $= 219 \text{ min} + 9:00$ $= 3 \text{ h } 39 \checkmark + 9:00$ $= 12:39 \text{ correct} \checkmark$	1MA adding times 1 total time 1A	ML3
28.3			
28.3.1	<b>perimeter</b> refers to the total distance around the outer boundary of the tennis court. $\checkmark \checkmark$	2A expla	ML1
28.3.2	$\text{P} = 2(23.77 + 10.97) \checkmark$ $= 2(34.74)$ $= 69.48 \text{ m} \checkmark$ $= 69 \text{ m} \checkmark$	1A substi 1A 1A rounded (3)	ML2
28.3.3	$\text{New length} = 23.77 + 2 + 2 = \mathbf{27.77 \text{ m}} \checkmark$ $\text{New width} = 10.97 + 2 + 2 = \mathbf{14.97 \text{ m}} \checkmark$ $\text{New perimeter} = 2(27.77 + 14.97)$ $= 2(42.74) \checkmark$	2MA new dimensions 1 simplif 1A (4)	ML2

	$=85.48 \text{ m} \checkmark$		
28.3.4	Litres needed $= 120/20 \checkmark$ $= 6 \text{ litres} \checkmark$	1MA 1A (2)	ML1
28.3.5	Total length to be paint $= 120 \text{m}$ $1.5 \text{min} = 3 \text{m}$ $\text{min} = 120 \text{m} \checkmark$ $\text{minutes} = \frac{120 \times 1.5}{3} \checkmark$ $= 60 \text{minutes} \checkmark$ Will be able to finish on time $\checkmark$	1MA 1MA 1Simpli 1Answer (4)	ML3
		[45]	

**QUESTION 29**

Ques	Answers	Explanation	T&L
29.1.1	B $\checkmark \checkmark$	2A correct answer	M L1 E
29.1.2	98Km/h $\checkmark \checkmark$	2A correct reading Accept 99km/h	M L1 E
29.2.1	$\frac{876\,000}{1000} \checkmark$ $= 876 \text{Km}$ $876 \text{Km} \div 2 \checkmark$ $= 438 \text{ km} \checkmark$	1C dividing by 1000 1MA dividing by 2 1A correct answer	M L3 E
29.2.2	$\frac{438 \text{km}}{110 \text{km/h}} \checkmark$ $= 3,9818 \text{ h} \checkmark$ $0,9818 \text{ h} \times 60 \checkmark$ $58,9 \text{ min}$ $= 3 \text{ h } 58 \text{ min} \checkmark$ $+ 14:35 \checkmark$ $= 17: 93 (-60)$ $= 16:33 \checkmark$	1SF substitution 1A answer 1C conversion 1A correct duration 1MA adding departure time 1CA answer	M L3  M
29.2.3	$6.8 \text{l} = 100 \text{km}$ $50 \text{l} = \dots \text{l}?$ $\checkmark$ $= \frac{50 \text{l} \times 100 \text{km}}{6.8 \text{l}} \checkmark$ $= 735.274 \text{km} \checkmark$ $= 735 \text{km} \checkmark$	1MA multiplying 50l by 100km 1MA dividing by 6.8l 1A answer 1R correct rounding	M L3  M
29.2.4	$\checkmark$ $876 \text{km} - 300 \text{km} \checkmark$ $= 576 \text{km} \checkmark$	1M subtracting km 1MA correct kms 1CA answer	M L4

	correct✓	1Justification	E
29.2.5	<ul style="list-style-type: none"> <li>Breathe taking views and land scape✓✓</li> <li>Reviews from the internet✓✓</li> </ul>	2O opinion 2O opinion	M L4 E
<b>TOTAL = [25]</b>			
<b>QUESTION 30</b>			
Ques	Solution	Explanation	T & L
30.1.1	One-way route -road or street where the bus is allowed to travel in only one direction. ✓✓	2A correct explanation	M L1 E
30.1.2	24-hour format.✓✓	2A correct answer	M L1 E
30.1.3	$15\text{min} \times 2 \checkmark$ $= 30\text{min} \checkmark$ 	1MA multiplying by 2 1A answer	M  L2 E
30.1.4	07h45min✓✓ 	2RT reading correct duration	M L1 M
30.1.5	$07\text{h}45\text{min} - 30\text{min} \checkmark = 07\text{h}15\text{min} \checkmark$ $\frac{15}{60}\text{min} \checkmark = 0,25\text{h} + 7\text{h} = 7,25\text{h}$  <i>Average speed</i> $= \frac{571\text{km}}{7,25\text{h}} \checkmark$  $= 78.759\text{km/h} \checkmark$	<b>MCA from 30.1.4</b> 1MCA subtracting stops time 1CA answer 1C conversion 1SF substitution 1CA answer	M      L3 M
30.1.6	<ul style="list-style-type: none"> <li>The bus is usually is slower than the small vehicles (maximum speed is not the same.) ✓✓</li> </ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>The bus has to stop in other towns.✓✓</li> </ul>	2O Explanation	M   L4 E
30.2			
30.2.1	$40 \times 3 \checkmark = 120\text{min} \checkmark$ $= 2\text{hours}$ $+ 1\text{ hour} \checkmark = 3\text{ hours}$ 06:00 $+ 3\text{ hours} = 09:00 \checkmark$	1MA multiplying by 3 1A answer 1MA adding 1-hour 1A answer 1MA adding	M     L3 D
30.2.2	$09:00 + 07\text{h}45\text{min} \checkmark$ $= 16:45 \checkmark$ Correct. ✓	1MCA adding the total duration 1CA time of arrival 1Justification	M  L2 E
30.2.3	<ul style="list-style-type: none"> <li>Technical issues✓✓</li> <li>Bad weather✓✓</li> <li>Health reasons on passengers✓✓</li> </ul>	2O reason 2O reason	M L4 E
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			<b>[27]</b>

### QUESTION 31

31.1.1	Distance chart✓✓	2A correct values (2)	M &P L1 E
31.1.2	1 660 km✓✓	2A RT	M&P L1 E (2)
31.1.3	Distance via Bloemfontein= 998 km +✓ 667 km✓ =1 665 km✓ Distance via East London = 1 042 km + 667 km✓  = 1 709km✓ 1 665 km < 1 709 km The statement is correct. ✓	2 A RT Correct values 1 MA Addition 2 A Distances 1 O	M&P L4 M  (6)
31.1.4	Distance to Beaufort West = 463 km✓ $118\text{km/h} = \frac{463\text{ km}}{\text{Time}} \checkmark$ $\text{Time} = \frac{463\text{km}}{118\text{km/h}} \checkmark$ Time = 3,92728814hours✓ Departure Time = 6 :45 + 3: 55✓ +0: 35 = 11 :15✓	1 RT Distance 1 SF 1 Time the subject of the formula 1CA Answer 1C Time 1MA 1 CA	M&P L3 M  (7)
31.2.1	Building Permit approval✓✓	2 RT	M L1 E (2)
31.2.2	0 zero✓✓	2RT	M L1 M (2)
31.2.3	Week 22 : 24 :26✓✓	2RT	M L1 M (2)
31.2.4	46 weeks – 9 weeks =37 weeks✓ Days worked = 37 weeks × 5✓ = 185 ✓	1A Number of weeks 1MCA Multiplying by 5 1CA Answer	M L2 M (3)
31.3.1	7:33 am✓✓	2A RT	M L1 E (2)
31.3.2	14 ; 34 – 8 : 28 = 6 : 6✓✓ (06 : 06 ) ÷ 2 = 03: 03✓ 08 : 28 + 03 : 03 = 11:31✓	1 MA CA 1MA 1CA	M L2 M (4)
31.3.3	09 :54 – 03 : 51 = 6h03min✓	1CA 2J	M L4



	06 hours < 6h03 min✓ I disagree with the statement✓		M (3)
<b>QUESTION 32</b>			
32.1.1	The diagram helps when planning trips✓✓	20	M L2 E (2)
32.1.2	Moore ✓✓	2A	M L1 E (2)
32.1.3	114km✓✓	2A	M L1 E (2)
32.1.4	60km/h = Distance ÷ (11:45 – 0:11:00)✓ = Distance ÷ (44 min ÷ 60)✓ = Distance ÷ 0,7333hours✓ Distance = 60km/h × 0,7333 hours✓ = 44km✓	1M 1M dividing 1 S 1SF 1CA	M L2 M (5)
32.1.5	1:04✓ – 1min✓ = 1:33pm✓	1RT 1M subtraction 1CA answer	M L2 E (3)
32.2.1	Friday the 1 <sup>st</sup> ✓at 2:15 am✓	2A	M L1 E (2)
32.2.2	$P(\text{Low tide} \geq 80\text{cm}) = \frac{2}{7} \times 100\% \checkmark \checkmark$ $= 28,57\% \checkmark$ unlikely✓	1A correct fraction 1M concept of % 1CA answer 1CA description	P L2 M (4)
32.2.3	Speed = 310 mph Distance = 120 nautical miles × 1,1507✓ = 138,084 miles✓ Time = 138,084 ÷ 310 mph✓✓ = 0,445432 ... × 60✓ = 0 hours 27 minutes✓	1M 1CA 2M 1CA 1CA	M L3 M (6)
32.3.1	21:55✓ Qatar Airways✓	2A	M L1 E (2)
32.3.2	21:55 + 25:40 = 47 hours 35 minutes✓ = 47:35 - 24:00✓ = 23:35 Sunday✓ The statement is not correct.✓	1M 1M 1CA 1O	M L4 M (4)
			<b>[32]</b>

QUESTION 33			
QUES	SOLUTION		T/ L
33.1.1	Area = $4\text{m} \times 3\text{m}$ ✓SF = $12\text{m}^2$ ✓A	1SF, substitution 1A, answer (2)	M L2
33.1.2	Total area = $12\text{m}^2 \times 8\,800$ seedbeds ✓M = $105\,600\text{m}^2$ ✓A $105\,600\text{m}^2 \div 10\,000\text{m}^2$ ✓C = $10,56\text{ha}$ ✓A	1M, multiplying 1A, answer 1C, conversion 1A, answer (4)	M L3
33.1.3	$\frac{105\,600 \times 10\text{g}}{1}$ ✓MCA = $1\,056\,000\text{g}$ ✓A ✓S  $\frac{1\,056\,000\text{g}}{1\,000\text{g}}$ ✓C = $1\,056\text{kg}$ ✓A	CA from 3.1.2 1MCA, multiplying 1S, simplification 1A, answer 1C, conversion 1A, answer (5)	M L2
33.1.4	$\frac{1056\text{kg} \times 1\text{bag}}{50\text{kg}}$ ✓MCA = $21,12$ ✓A ✓C = $22$ bags ✓R	CA from 3.1.3 1MCA, multiplying 1C, conversion 1A, answer 1R, rounding (4)	M L3
33.1.5	Total cost = $22\text{bags} \times \text{R}875$ ✓M = $\text{R}19\,250$ ✓A	CA from 3.1.4 1M, multiplying 1A, answer (2)	M L2
33.1.6	$\frac{40\text{cm}}{100} = 0,4\text{m}$ ✓C Volume of soil = $4\text{m} \times 3\text{m} \times 0,4\text{m}$ ✓SF = $4,8\text{m}^3$ = $4,8\text{m}^3 \times \frac{80}{100}$ = $3,84\text{m}^3$ ✓A	1C, conversion 1SF, substitution 1A, answer (3)	M L3
33.2.1	Radius = $\frac{2420}{2}$ ✓M = $1210\text{mm}$ = $\frac{1210\text{mm}}{1000\text{mm}}$ ✓C = $1,21\text{m}$ ✓A	1M, dividing by 2 1C, conversion 1A, answer (3)	M L1
33.2.2	Height of tank = $9,05\text{m} - 6,5\text{m}$ ✓M = $2,55\text{m}$ ✓A  Volume of tank = $3,142 \times (1,21\text{m})^2 \times 2,55\text{m}$ ✓SF = $11,73051561\text{m}^3$ ✓A = $11,73051561\text{m}^3 \times 1\,000$ litres ✓C = $11\,730,51561\text{ litres}$ ×	1M, subtracting 1A, answer 1SF, substitution 1A, answer 1C, conversion 1MA, multiplying 1R, rounding	M L3

	$\frac{89}{100} \checkmark \text{MA}$ $= 10\,440,15888$ $= 10\,000 \text{ litres} \checkmark \text{R}$	(7)	
33.2.3	$\frac{10 \text{ mins} \times 10\,000 \text{ litres}}{2\,500} \checkmark \text{M} = 40 \text{ minutes}$ $= 40 \text{ minutes} \div 60$ $\text{minutes} \checkmark \text{C}$ $= 0,67 \text{ hrs} \checkmark \text{A}$	1M, multiplying and dividing 1C, conversion 1A, answer (3)	M L2
<b>QUESTION 34</b>			
<b>QUES</b>	<b>SOLUTION</b>	<b>EXPLANATION</b>	<b>T/L</b>
34.1.1	$\text{Length} = \frac{(10,49 \text{ ft} \times 0,305 \text{ m})}{1 \text{ ft}} \checkmark \text{C}$ $= 3,19945$ $= 3,2 \text{ m} \checkmark \text{A}$	1C, conversion 1A, answer (2)	M L1
34.1.2	$\text{Area of door and window} = (0,9 \text{ m} \times 2 \text{ m}) + (1,2 \text{ m} \times 0,8 \text{ m})$ $= 2,76 \text{ m}^2 \checkmark \text{M}$ $\checkmark \text{SF}$ $\text{Surface area of walls} = 2(3,2 \text{ m} \times 2,4 \text{ m}) + 2(2,6 \text{ m} \times 2,4)$ $= 27,84 \text{ m}^2 + 0,78 \text{ m}^2 \checkmark \text{A}$ $= 28,62 \text{ m}^2 \checkmark \text{A}$ $\text{Area to paint} = 28,62 \text{ m}^2 - 2,76 \text{ m}^2 \checkmark \text{MA}$ $= 25,86 \text{ m}^2 \checkmark \text{A}$	1M, multiplying and adding areas 1SF, substitution into formula 1M, adding 1A, answer 1MA, subtracting 1A, answer (6)	M L3
34.1.3	$\text{Amount of paint litres} = \frac{25,86 \times 1 \text{ litre}}{1,8} \checkmark \text{MCA}$ $= 14,3666666 \times 2 \checkmark \text{M}$ $= 28,73333$ $= 29 \text{ litres} \checkmark \text{R}$ <p>Her statement is incorrect <math>\checkmark \text{O}</math></p>	1MCA, conversion 1M, multiplying by 2 1R, rounding 1O, conclusion (4)	M L4
34.1.4	$\text{No. of 5 litre buckets} = 29 \text{ litres} \div 5 \checkmark \text{M}$ $= 5,8 \checkmark \text{A}$ $= 6 \text{ buckets} \checkmark \text{R}$ $\text{No. of roof paint litres} = 17,92 \text{ m}^2 \div 2,2 \text{ m}^2$ $= 8,145$ $= 9 \text{ litres} \checkmark \text{A}$ <p>Therefore, only one 10 litre bucket needed <math>\checkmark \text{C}</math></p> $\checkmark \text{MCA}$ $\text{Total cost} = 6 \times \text{R}199,95 + \text{R}209,99 \times 1 + \text{R}600$ $= \text{R}2\,009,69 \checkmark \text{A}$	<b>CA from 34.1.3</b> 1M, dividing 1A, answer 1R, correct rounding 1A, answer 1C, conclusion 1MCA, multiplying and adding 1A, answer (7)	M L3
34.2.1	$\text{Floor area of wendy house} = 3,2 \text{ m} \times 2,6 \text{ m} \checkmark \text{S}$ $= 8,32 \text{ m}^2 \checkmark \text{A}$	1S, substitution 1A, answer (2)	M L2


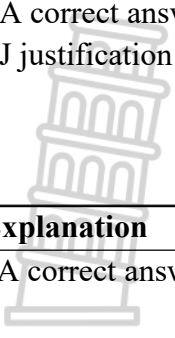
34.2.2	<p>Side length of tile = <math>12 \times 2,54\text{cm}</math>  <math>= 30,48\text{ cm} \checkmark \text{M}</math>  <math>= \frac{30,48\text{cm}}{100\text{cm}}</math>  <math>= 0,3048\text{m} \checkmark \text{C}</math>          Area of each tile = <math>0,3048\text{m} \times 0,3048\text{m} \checkmark \text{S}</math>  <math>= 0,09290304\text{m}^2 \checkmark \text{A}</math>          Total area of box = <math>0,09290304\text{m}^2 \times 20</math>          tiles <math>\checkmark \text{MA}</math>  <math>= 1,858... \text{m}^2</math>  <math>= 1,86\text{m}^2 \checkmark \text{A}</math></p>	<p>1M, multiplying 12 by 2,54          1, conversion          1S, substitution          1A, area of tile          1MA, multiplying by 20          1A, answer          (6)</p>	M L3
34.2.3	<p>Number of boxes = <math>\frac{8,32\text{ m}^2}{1,86\text{m}^2} \checkmark \text{M}</math>  <math>= 4,473 \checkmark \text{A}</math>  <math>= 5 \text{ boxes} \checkmark \text{R}</math></p>	<p><b>CA from 34.2.1 and 34.2.2</b>          1M, dividing          1A, answer          1R, rounding          (3)</p>	M L2



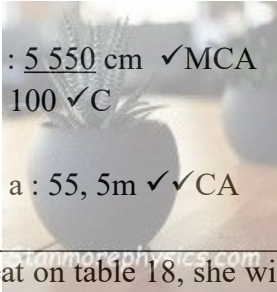
**QUESTION 35 Marks**



No.	Solution	Explanation	T/L
35.1	Mathematical/putting a province ✓✓A	2A correct answer (2)	MP L1 E
35.2	10 gates ✓✓A	2A correct number of gate (2)	MP L1 E
35.3	In case of injuries or collapses or health problems during the events or games ✓✓O	2O correct opinion (2)	MP L4 M
35.4	Capacity- is the maximum number of people/spectators Mbombela Stadium can accommodate ✓✓E	2E correct explanation (2)	MP L1 E
35.5	Fourty three thousand five hundred people/spectators ✓✓RT	2RT correct answer (2)	MP L1 E
35.6	$\text{North} = 43\,500 \times \frac{20}{100} \checkmark \text{MA}$ $= 8\,700 \checkmark \text{A}$ $\text{South} = 43\,500 \times \frac{25}{100} \checkmark \text{MA}$ $= 10\,875 \checkmark \text{A}$ $\text{East} = 43\,500 \times \frac{30}{100} \checkmark \text{MA}$ $= 13\,050 \checkmark$ $\text{West} = 10\,875 \checkmark \text{A}$	2A multiplying correct values 1A correct answer 2A multiplying correct values 1A correct answer 2A multiplying correct values 1A correct answer 1A correct answer (7)	MP L3 M
35.7	Ratio/Number scale ✓✓A	2A correct answer (2)	MP L1 E
35.8	Advantage • More accurate than bar scale ✓✓A OR	1A correct advantage	MP L2



	<ul style="list-style-type: none"> <li>• More convenient when working at a very small scale✓A</li> </ul> <p>Disadvantage</p> <ul style="list-style-type: none"> <li>• Require calculations to determine the distances/lengths in reality✓A</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• With digital printing the scale becomes inaccurate</li> </ul>	1A correct disadvantage (2)	
35.9	<p>Actual length = <math>120\text{m} \div 500</math>✓MA  <math>= 0,24\text{m}</math> ✓S <math>\times 100</math>✓C  <math>= 24\text{cm}</math>✓A</p>	<p>1MA dividing correct values  1S correct simplification  1C conversion  1A correct answer (4)</p>	MP L3 M
35.10	<p>Area = <math>l \times w</math>  <math>7\,140\text{m}^2 = 105\text{m} \times w</math>✓SF  <math>\frac{7\,140}{105} = \frac{105\text{m}}{105\text{m}}</math> ✓MA  <math>68\text{m} = w</math>✓A</p> 	<p>1SF correct substitution  1MA dividing by 105m  1A correct answer  (3)</p>	MP L2 M
35.11	100%✓✓A	2A correct answer (2)	MP L1 E
35.12	SW✓✓A	2A correct answer (2)	MP L1 E
35.13	EAST grandstand✓✓RT	2RT correct answer (2)	MP L1 E
35.14	<p>✓MA ✓MA  Total received = <math>(R1\,200 \times 3000) + (R\,600 \times 12\,002)</math>  ✓MA  <math>+ (R\,300 \times 23\,400)</math>  <math>= R17\,821\,200</math>✓A</p> <p>The claim is correct.✓J</p>	<p>1MA R1 200 <math>\times</math> 3000  1MA R600 <math>\times</math> 12 002  1MA R300 <math>\times</math> 23 400  1A correct answer  1J justification  (5)</p> 	MP L4 E
<b>Q 36</b>	<b>Solution</b>	<b>Explanation</b>	<b>T&amp;L</b>
36.1	Newcastle✓✓A	2A correct answer (2)	MP L1 E
36.2	Floor plan✓✓A	2A correct a (2)	MP L1 E
36.3	Between Truworths and shop number 028✓✓RT	2RT correct answer	MP

		(2)	L1 E
36.4	Pick 'n Pay, Woolworths✓A, Edgars, Game✓A, and Checkers✓A	1A first 2 correct answer 1A correct answer 1A correct answer (3)	MP L1 E
36.5	Entrance 1✓✓RT	2RT reading from a diagram (2)	MP L1 E
36.6	South✓✓RT	2RT reading from a diagram (2)	MP L1 E
36.7	It does not have stairs✓✓O <b>OR</b> It does not have elevators✓✓O  The claim is incorrect✓J	2O opinion  2O opinion  1J justification (4)	MP L4 M
36.8	Actual distance = $1.2 \text{ cm} \times 200$ ✓MCA  $= 240 \div 100$ ✓MA $= 2.4 \text{ m}$ ✓CA	1RT correct scale 1MCA multiplying by 200 1MA dividing by 100 1CA answer (4)	MP L3 M
36.9	2✓✓RT	2RT reading from the map (2)	MP L2 E
36.10	From entrance 2✓ enter the mall, and go straight past Spur. Continue until you see a passage,✓ then turn left. Pass Jet and Ackerman's stores on your left, and continue in a northerly direction✓; then you will reach Game store on your left.✓	1RT correct answer 1RT correct answer 1RT arriving at Game store (4)	MP L2 M
		[27]	
<b>Question 37</b>			
37.1	A scaled 2 dimensional drawing of a restaurant in Casablanca where Banyana Banyana dined ✓✓E	2E correct contextual explanation (2)	MPS L1
37.2	Ratio scale ✓✓A  1 unit on the image is the equivalence of 500 units on the ground ✓✓E	2A identifying the scale 2A correct Explanation (4)	MPS L1
37.3	Seat 14 ✓A, 12 ✓A and 11 ✓A	3A correct seat numbers (3)	MPS L1
37.4	8 Tables ✓✓A	2A correct number of	MPS

	34 Chairs ✓✓A	tables 2A correct number of chairs (4)	L2
37.5	$8 - 1 = 7$ ✓MA $P = \frac{7}{8}$ ✓MCA x 100 $= 87,5\%$ ✓CA $\approx 90\%$ ✓R	1MA subtracting 1 1MCA Dividing by 8 1CA simplification 1R rounding (4)	P L2
37.6	Image: actual  11,1 cm ✓A: a 1 cm: 500 cm   a : <u>5 550</u> cm ✓MCA 100 ✓C  a : 55,5m ✓✓CA	1A measurement of inner length  1MCA multiplying 500cm with measured length 1MA, correct conversion. 1CA simplification (4)	MPS  L3
37.7	From her indicated seat on table 18, she will walk east facing table 17 and turn on her right to walk southwards ✓. Between table 5 and 7, she will turn on her left to walk eastwards ✓ passing the main entrance ✓ on her right until she reaches her destination, table 11 ✓.	4E explanation of the path  (4)	MPS  L4
			[31]
<b>Question 38</b>			
38.1	0.3 cm ✓M = 1m 1.2 cm = a  $\frac{1.2}{0.3}$ ✓MCA = $\frac{0.3}{0.3}$ a 4 = a ✓CA	1M measuring the between the desks 1MCA multiplying by the scale 1MCA dividing by the measured distance 1CA simplification (4)	MPS  L3
38.2	$P = \frac{8}{21}$ ✓✓RT  = 0.380952381 ✓A	1RT numerator 1RT denominator 1A simplification (3) <b>NPR</b>	P  L 2
38.3	North East ✓✓A	2A accuracy (2)	MPS L 1
38.4	6 x 4 m = 24 m ✓MA	1MA multiplying 6 by 4	MPS

	$6 \times 1 \text{ m} = 6 \text{ m} \checkmark \text{MA}$ $24 \text{ m} + 6 \text{ m} + 4.4 \text{ m} \checkmark \text{MCA}$ $= 34.4 \text{ m} \checkmark \text{CA}$ $34.4 \text{ m} - 30 \text{ m} \checkmark \text{MCA}$ $= 4.4 \text{ m} \checkmark \text{CA}$ Valid $\checkmark \text{O}$	m/answer from <b>38.1.</b> 1MA multiplying 6 by 1m. 1MCA adding values 1CA simplification 1MCA subtraction 1CA simplification 1O conclusion (7)	L 4
38.5	21 learners $\checkmark \checkmark \text{A}$	2A correct number of learners (2)	MPS L 1
38.6	Desks 1, 2, 3 and 4 $\checkmark \checkmark \text{A}$ 	2A correct identification all of desks (2)	MPS L 1
38.7	A – South $\checkmark \text{A}$ B – North $\checkmark \text{A}$ C – West $\checkmark \text{A}$ D – East $\checkmark \text{A}$ 	1A identifying South 1A identifying North 1A identifying west 1A identifying east (4)	MP L 1
38.8	Floorplan a 2D graphic aerial view of the floor with its desks $\checkmark \checkmark \text{A}$ Whereas Elevation a 2D graphic side view of the walls $\checkmark \checkmark \text{A}$	2A, differentiating between the two concepts 2A (4)	MP L 4
38.9	Any two advantages $\checkmark \checkmark \checkmark \checkmark \text{A}$	4A correct advantages (4)	
			[31]
<b>Question 39</b>		Explanation	TL
39.1.	2 National Road $\checkmark \checkmark \text{RT}$	2RT correct national road (2)	M L1 E
39.2.	Bar scale remain accurate even if the map is enlarged , the bar scale will be enlarged accordingly. $\checkmark \checkmark \text{A}$	2 A (2)	M L1 E
39.3.	A. North East $\checkmark \checkmark \text{A}$ B. South West $\checkmark \checkmark \text{A}$	2A correct direction 2A correct direction (4)	M L1 M
39.4.	Bar scale / Linear Scale $\checkmark \checkmark \text{A}$	2A correct scale	M L1

		(4)	E
39.5.	22 mm ✓✓ A	2A measurement (2)	M L1 E
39.6.	22 mm : 8 km ✓ MA  $\frac{22\text{mm}}{22\text{mm}} : \frac{8\,000\,000\text{mm}}{22\text{mm}} \checkmark \text{C}$ 1 : 363 636 ✓ A  1 : 363 600 ✓ R	1MA map measurement 1C conversion 1 MA dividing with 22mm 1A answer 1R correct rounding  (5)	M L3 M
39.7.	$\frac{22\text{ mm}}{70\text{ mm}} \checkmark : ?$  $\frac{70\text{mm}}{22\text{ mm}} \times 8\text{km} \checkmark = 25,45\text{ km} \checkmark$ Incorrect ✓	1M measured map size 1S simplification 1A answer  1O conclusion (4)	M L4 M
39.8.	(a) Number of litres = $\frac{50\text{km}}{15,4\text{km}} \checkmark \text{S}$ = 3,25 litres ✓ A Return trip = $3,25 \times 2 \checkmark \text{MA}$ = 6,5 litres ✓ A	1S simplification  1A answer 1M multiplying by 2 1A answer (4)	M L3 M
	(b) Cost of petrol = $6,5 \times \text{R}21,46 \checkmark \text{MA}$  = R139,49 ✓ A	1MA multiplying with R21,46 1A answer (2)	M L2 M
			[27]
<b>Question 40</b>			
40.1.	Strip map ✓✓ RT	2RT correct type of map  (2)	M L1 E
40.2.	N2 ✓✓ RT	2RT correct name of road  (2)	M L1 E
40.3.	✓ RT Distance in (m) = $964\text{ km} \times 1\,000 \checkmark \text{C}$  = 964 000 m ✓ A	1 RT correct distance 1C conversion 1A correct answer in m.	M L1 M



		(3)	
40.4.	Grahams-town ✓✓RT	2RT correct town (2)	M L1 E
40.5.	R335, R72, R61, R63, R56, R101, R617 ✓✓RT	2RT name of regional road (any two) (2)	M L1 E
40.6.	Addo Elephant National Park ✓✓RT	2RT correct national park (2)	M L1 E
40.7.	Time = $964 \text{ km} \div 115 \text{ km/h}$ ✓✓MA = 8,38 hrs ✓A = 8 h 23 min ✓C Incorrect statement / Invalid statement ✓	2MA dividing 1A answer 1C converting to hours and minutes 1O conclusion (5)	M L4 M
40.8.	Arrival time = $05 : 30 + 8 \text{ h } 23 \text{ min}$ ✓✓MA = 14:38 ✓A	2MA adding time 1A answer -arrival time (3)	M L2 E
40.9.	No. of litres = $964 \text{ km} \div 100 \times 71$ ✓MA = 67,48 Litres ✓A For return = $67,48 \times 2$ ✓MA = 135 Litres ✓A Fuel cost = $135 \text{ l} \times R23,20$ ✓MA = R3 132 ✓A Accommodation = $R950 \times 2$ ✓MA = R1 900 ✓A TC = $3\,132 + 1900 + 500 + 300$ ✓MA = R5 832. ✓A It is sufficient. ✓	1MA multiplication 1A simplification 1MA return  1MA multiply by R23,20  1MA multiplying by 2 1MA acc cost 1MA adding all correct values 1A answer 1C conclusion (11)	M L4 D
			[32]
<b>QUESTION 41</b>			
41.1	Residential map ✓✓A	2A correct type of a map	MP L1 E
41.2	South West ✓✓ and North ✓	2A for SW 1A for N	MP L1 E

41.3	From unit 1 head towards the East to Mark street. ✓ Go towards the South. ✓ Pass unit 9, 11, 13 Pass the Main Road ✓ Pass unit 14 Then the bus Stop will be on the right hand side. ✓	1A for each correct point	MP L4 E
41.4	North of the clinic. ✓ It is a safe place since there is a police station nearby. ✓✓	1O correct location 2A reason	MP L4 E
41.5	Actual distance = $\frac{5 \text{ cm}}{1 \text{ cm}} \times 200 \text{ m}$ ✓ = $1000 \text{ m} \times 5$ ✓ = $\frac{5000 \text{ m}}{1000}$ ✓ = $5 \text{ km}$ ✓	1A multiplying 5 cm by 200m 1A multiplying by 5 1A converting m to km 1A correct answer	MP L3 M
41.6	Actual distance = $10,6 \text{ cm} \times \frac{200 \text{ m}}{1 \text{ cm}}$ ✓ = $\frac{2120 \text{ m}}{1000}$ ✓ = $2,12 \text{ km}$ ✓ Time = $\frac{2,12 \text{ km}}{40 \text{ km/h}}$ ✓ = $0,053 \text{ hours}$ ✓	1MA multiplying by scale 1A correct answer 1CA converting m to km 1CA correct answer 1 SF correct substitution 1CA correct answer	MP L3 D
41.7	Number of poles = $\frac{1500 \text{ m}}{400 \text{ m}}$ ✓ = $3,75$ ✓ = $4 \text{ poles} + 1 \text{ pole}$ ✓ = $5 \text{ poles}$ ✓	1A dividing 1500m by 400m 1A correct answer 1A adding 1 pole 1A correct answer	MP L3 M
41.8	Probability = $\frac{12}{17} \times 100$ ✓ = $70,59 \%$ ✓	1A correct numerator 1A correct denominator 1A percentage 1CA correct answer	P L2 E
			[29]
<b>QUESTION 42</b>			
42.1	B3 ✓✓ A	2A correct grid reference.	MP L1 E
42.2	North West ✓✓ A	2A correct answer.	MP L1 E
42.3	Number scale, ✓ A calculations will be inaccurate after resizing or photocopying or reprinting the map. ✓✓ O	1A correct scale. 2O correct reason.	MP L1 E

42.4	✓✓A	2A correct drawing.	MP L1 E
42.5	Pine Street ✓✓A	2A correct answer.	MP L1 M
42.6	Actual distance = 4,2 cm × 1 00 ✓MA = 420 cm ✓A = 4 200 cm 100 000 ✓C = 0,042 km ✓CA	1MA multiplying by scale. 1A answer. 1C conversion. 1CA correct answer.	MP L1 E
42.7	It's on the corner of Old Main Road and Relin street. ✓✓A	2A correct answer.	MP L1 M
42.8.	Time in hours = $\frac{18 \text{ min}}{60}$ ✓C = 0,3 hours ✓A Speed = $\frac{\text{distance}}{\text{time}}$ = $\frac{1,2 \text{ km}}{0,3 \text{ h}}$ ✓SF = 40 km/h ✓CA	1C conversion 1A correct answer 1SF correct substitution 1CA	
42.9	Total Earnings = R9,50 × 7 ✓A = R66,50 × 4 ✓A = R266,00 ✓CA His claim Is not correct ✓	1A multiplying R9,50 by 7 km 1A multiplying the answer by 4 trips. 1CA correct answer 1O verification	
42.10	.....From Pen Reed street head south. ✓ Turn right towards Old Main Road and head East. ✓ At the T junction head South towards Rilen street. ✓ The petrol station will be at the corner of Rilen and Old Main road. ✓	1A each correct point	
42.11	This is not a suitable location. ✓ Grid reference C3 is not accessible or no roads ✓✓	1O for the answer 2A correct reason	
			[29]
<b>QUESTION 43</b>			
43.1.1	Volume of the Rectangular box = Length × Breadth × Height ✓C 13,86 m <sup>3</sup> = 5,5 m × 0,9 m × Height ✓SF Height = 13,86 ÷ 4,95 ✓S Height = 2,8 m ✓A	1C conversion to metres 1SF substitution 1S simplification 1A correct answer (4)	M & P L3
43.1.2	<b>PLEASE COMPARTMENTALISE DURING MEDIATION OF THIS ANSWER</b>		
	<b>Option 1:</b> Number of boxes with length of the packing box against the		M & P

	<p><b>width of the wooden box:</b></p> $= \frac{\text{Width of wooden box}}{\text{Length of packing box}}$ $= \frac{0,9}{0,5} \checkmark A \checkmark A$ $= 1,8$ $\approx 1 \text{ box } \checkmark A$ <p><b>Number of boxes with width of the packing box against the length of the wooden box:</b></p> $= \frac{\text{Length of wooden box}}{\text{Width of Packing box}}$ $= \frac{5,5}{0,2} \checkmark C$ $= 27,2$ $\approx 27 \text{ boxes } \checkmark A$ <p>Therefore, total number of boxes = <math>1 \times 27</math>  <math>= 27 \text{ boxes } \checkmark A</math></p> <p><b>COMPARED TO:</b></p> <p><b>Option 2:</b></p> <p><b>Number of boxes with length of the packing box against the length of the wooden box:</b></p> $= \frac{\text{Length of wooden box}}{\text{Length of packing box}}$ $= \frac{5,5}{0,5}$ $= 11 \text{ boxes } \checkmark A$ <p><b>Number of boxes with width of the packing box against the width of the wooden box:</b></p> $= \frac{\text{Width of wooden box}}{\text{Width of packing box}}$ $= \frac{0,9}{0,2}$ $= 4,5$ $\approx 4 \text{ boxes } \checkmark A$ <p>Therefore, total number of boxes = <math>11 \times 4</math>  <math>= 44 \text{ boxes } \checkmark A</math></p> <p>44 BOXES &gt; 27 BOXES          Option 2 will have more boxes.          The claim is invalid/not valid. <math>\checkmark O</math></p>	<p>1A no. of boxes in width          1A no. of boxes in length          1A total no. of boxes</p> <p>1C length to 5,5m</p> <p>1A no. of boxes in width</p> <p>1A total no. of boxes</p> <p>1A no. of boxes in length</p> <p>1A no. of boxes in width</p> <p>1A total no. of boxes          1O opinion (10)</p>	L4
43.2.1	<p style="text-align: center;"><math>\checkmark C</math> <span style="float: right;"><math>\checkmark A</math></span></p> <p>Bottle diameter = <math>52 \times 2 \div 1000</math> Length = width = 0,104 m          Bottle height = <math>327 \div 1000</math>  <math>= 0,327 \text{ m } \checkmark A</math></p> <p>Pallet length = <math>8 \times 0,104 \checkmark MA</math>  <math>= 0,832 \text{ m}</math></p> <p>Pallet width = <math>8 \times 0,104 \text{ m}</math>  <math>= 0,832 \text{ m } \checkmark A</math></p>	<p>1C conversion          1A answer of width          1A answer</p> <p>1MA multiply by 0,104</p> <p>1A answer of pallet width</p> <p>1A answer lengthwise pallet</p>	M & P L4

	Pallet height = 0,327m Pallet Lengthwise = $8,1 \div 0,832\text{m}$ $= 9 \checkmark A$ <span style="float: right;"><math>\checkmark MA</math></span> Number of pallets (trailer 2) Width wise = $2,45\text{m} \div 0,832\text{m}$ $= 2$ Number of pallets (trailer 2) Height wise = $2,6\text{m} \div 0,327\text{m}$ $= 7$ Total number of pallets (trailer 2) = $9 \times 2 \times 7$ $= 126 \checkmark A$	1MA dividing by 0,832m  1A for total pallets	
43.2.2	Double cab bakkie load size = $1,5 \text{ ton} \times 1000 = 1\,500 \text{ kg} \checkmark C$  12 Pallets load size = $\checkmark MA$ $(8 \times 8 \text{ bottles}) \times 2 \text{ litre} = 128 \text{ litre} \times 12 \text{ pallets} \checkmark MA$ $= 1\,536 \text{ litres} = 1\,536 \text{ kg} \checkmark A$  $1\,536 \text{ kg} > 1\,500 \text{ kg}$ His statement is INCORRECT $\checkmark O$ <b>OR</b> Number of pallets = $1\,500 \text{ kg} \div 128 \text{ kg} \checkmark MA$ $= 11,7 \text{ pallets}$ $\approx 11 \text{ pallets} \checkmark A$  $11 \text{ pallets} < 12 \text{ pallets} \checkmark A$ His statement is INCORRECT $\checkmark O$	1C conversion  1MA multiply by 8 1MA multiply by 12 pallets 1A answer in kg  1O opinion <b>OR</b> 1C conversion 1MA dividing by 128kg 1A answer  1A comparison 1O opinion (5)	M & P L4
		<b>TOTAL</b>	<b>[27]</b>

**QUESTION 44**

Ques.	Solution/s	Explanation	T/L
44.1.1	5 $\checkmark \checkmark RT$	2RT reading from diagram (2)	M & P L1
44.1.2	Tripod $\checkmark \checkmark RT$	2RT reading from diagram (2)	M & P L1
44.1.3	Clockwise $\checkmark \checkmark A$	2A answer (2)	M & P L1
44.1.4	(a) H $\checkmark \checkmark RT$	2RT reading from diagram (2)	M & P



			L1
	(b) G ✓✓RT	2RT reading from diagram (2)	M & P L1
44.2.1	10 screws ✓✓RT	2RT reading from diagram (2)	M & P L1
44.2.2	Allen Key ✓✓RT	2RT reading from diagram (2)	M & P L1
44.2.3	Step 2 ✓✓RT	2RT reading from diagram (2)	M & P L1
44.2.4	<p>Arrows – indicate the direction in which the parts should be moved, placed or inserted, guiding the user through each step visually. ✓✓O</p> <p><b>OR</b></p> <p>Symbols – either the hand or tools, show actions such as tightening, aligning, or positioning, making it easy to follow even written instructions. ✓✓O</p> <p><b>OR</b></p> <p>Arrows/Symbols is especially helpful for users who speak different languages or have limited literacy skills ✓✓O</p>	<p>2O opinion</p> <p>(2)</p>	M & P L4
44.2.5	<p>Poor mattress support – the mattress may sag/become damaged/not last long over time due to lack of even support. ✓✓O</p> <p>Safety risk – Uneven or loosely placed long support panel can shift or fall out, increasing the risk of injury to the user or damaging the structure of the bed. ✓✓O</p>	<p>2O for opinion first opinion</p> <p>2O for opinion second opinion (4)</p>	M & P L4
44.2.6	<p>✓A</p> <p>Probability = <math>\frac{6}{33}</math> x 100% ✓MA</p> <p>✓A</p> <p>= 18,18%</p> <p>≈ 18% ✓CA</p>	<p>1A numerator</p> <p>1A denominator</p> <p>1MA concept of percentage</p> <p>1CA answer (4)</p>	P L2

44.2.7	<p>The user is kneeling to maintain better balance while placing the long support panel, which reduces the risk of incorrect assembly. ✓✓O</p> <p style="text-align: center;"><b>OR</b></p> <p>It allows the user to work closer to the bed base and align the bed ends and the long support panel securely. ✓✓O</p>	2O opinion (2)	M & P L4
			<b>[28]</b>
<b>QUESTION 45</b>			
45.1.1	Tree diagram ✓✓A	2A correct name (2)	P L1
45.1.2	Drama ✓A and Comedy ✓A	1A drama 1A comedy (2)	P L1
45.1.3	6 ✓✓A	2A counting number of outcomes (2)	P L2
45.1.4	$P(\text{Fanta}) = \frac{1 \sqrt{A}}{6 \sqrt{A}}$ $= 0,17 \sqrt{R}$	1A correct numerator 1A correct denominator 1R answer with rounding (3)	P L2
45.1.5	$P(\text{Chips}) = \frac{2}{6} \sqrt{A} \times 100\% \sqrt{M}$ $= 0,34\% \sqrt{CA}$ <p>The statement is incorrect. ✓O</p>	1A correct fraction 1M percentage concept 1CA answer as a percentage 1O verification (4)	P L2
45.2.1	Point of sales records. ✓✓O	2O identifying a possible tool (Any other reasonable answer) (2)	P L1
45.2.2	$A = 870 - 201 - 150 - 195 - 104 \sqrt{M}$ $= 220 \sqrt{A}$	1M subtracting numbers from 870 1A answer (2)	P L2
45.2.3	Bumper Cars ✓✓A	2A correct answer (2)	P L1
45.2.4	$P(\text{Ride 2}) = \frac{150 \sqrt{A}}{870 \sqrt{CA}}$ $= \frac{5}{29} \sqrt{CA}$	1A numerator 1CA denominator 1CA (3)	P L2
45.2.5	$P(\text{Swing Boat Ride}) = \frac{104 \sqrt{A}}{870} \times 100\% M$	1A correct numerator and denominator	P L2

	$= 11,95\% \sqrt{S}$ $= 10\% \sqrt{R}$ <p>The claim is valid. <math>\sqrt{O}</math></p>	1M times 100 1S simplification 1CA answer rounded to nearest 10% 1O verification (5)	
			[27]
<b>QUESTION 46</b>			
46.1.1	Categorical $\sqrt{A}$ The outcomes are in categories of colour. $\sqrt{\sqrt{O}}$	1A Correct answer 2O Explanation (3)	DH L1
46.1.2	(a) BG $\sqrt{A}$ (b) BR $\sqrt{A}$	1A correct outcomes 1A correct outcomes (2)	P L2
46.1.3	$P(\text{Red Ball}) = \frac{1\sqrt{A}}{6\sqrt{A}}$ $= 0,17 \sqrt{A}$	1A numerator 1A denominator 1A answer (3)	P L2
46.1.4	36 outcomes $\sqrt{\sqrt{A}}$	2A correct answer (2)	P L2
46.1.5	P (Not choosing winning combination) $= \frac{36 - 1\sqrt{MA}}{36\sqrt{A}}$ $= \frac{35}{36} \sqrt{CA}$	1MA subtracting the winning combination from the total 1A correct denominator 1CA answer (3)	P L3
46.2.1	$A = 25 - 10 \sqrt{M}$ $= 15 \sqrt{A}$ $B = 55 - 34 \sqrt{M}$ $= 21 \sqrt{A}$ $C = 101 \sqrt{\sqrt{A}}$ $D = 101 - 54 \sqrt{MCA}$ $= 47 \sqrt{CA}$ $E = 47 - 10 - 34 \sqrt{MCA}$ $= 3 \sqrt{CA}$ $F = 3 + 18 \sqrt{MCA}$ $= 21 \sqrt{CA}$	1M subtraction 1A answer 1M subtraction 1A answer 2A answer 2MCA subtraction 1CA answer 1MCA subtraction 1CA answer 1MCA addition 1CA answer (12)	P L3
46.2.2	$P(\text{Female - Rugby}) = \frac{18\sqrt{A}}{101\sqrt{MCA}}$ $= 0,18 \sqrt{R}$	1A correct numerator 1MCA denominator 1R answer with correct	P L3

		rounding (3)	
46.2.3	$18 \div 6 \sqrt{\text{M}}$ $= 3 \sqrt{\text{A}}$ The statement is valid. $\sqrt{\text{O}}$	1M division 1A answer 1O verification (3)	P L4
			[31]

