



KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

**PROVINCIAL STANDARDISED
ASSESSMENT**

GRADE 12

MATHEMATICAL LITERACY P2

JUNE 2026

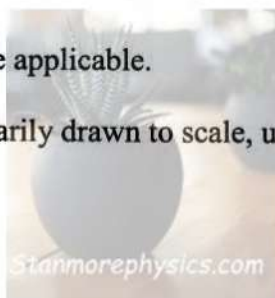
MARKS: 100

TIME: 2 hours

This question paper consists of 9 pages and a 13-page Special Answer Book.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Answer ALL the questions in the SPECIAL ANSWER BOOK provided.
3. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
4. Show ALL calculations clearly.
5. Round off ALL final answers appropriately according to the given context, unless stated otherwise
6. Indicate units of measurement, where applicable.
7. Maps and Diagrams are NOT necessarily drawn to scale, unless stated otherwise.
8. Write neatly and legibly.



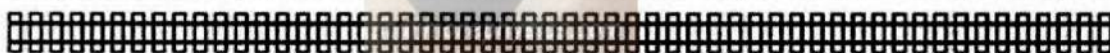
Stanmorephysics.com

QUESTION 1

1.1

The Blue Train is a famous luxury train in South Africa that started operating in 1923. Shown below is one of the routes undertaken by the train, travelling from Pretoria to the Kruger National Park and back.

BLUE TRAIN 2026 PRETORIA - KRUGER NATIONAL PARK			
25 - 27 June 2026 *Return trip rates only			
DEPARTURE		ARRIVAL	
DAY 1: Pretoria 13:00 (pm)		DAY 2: Kruger National Park 05:00 (am)	
DEPARTURE		ARRIVAL	
DAY 2: Kruger National Park 22:00 (pm)		DAY 3: Pretoria 18:00 (pm)	
Luxury Double: Rate per person sharing	R 92 335.00	De Luxe Double: Rate per person sharing	R 74 275.00
Luxury Single: Occupancy rate +50%		De Luxe Single: Occupancy rate +50%	



*Terms and conditions are deemed to be accepted upon confirmation of booking.

[Source: luxurytrainsouthafrica.com]

Use the information above to answer the questions that follow.

- 1.1.1 Determine the number of years the Blue Train has been in operation. (2)
- 1.1.2 Write the departure time for Day 1 in the 12-hour time format. (2)
- 1.1.3 Calculate the duration of the trip on Day 1 on route to the Kruger National Park. (2)
- 1.1.4 The distance from the Kruger National Park to Pretoria is 385 km. Write down which ONE of the methods below is the correct method to calculate the speed of the train on its return journey to Pretoria.
- Write only the letter (A-C) next to the question number (1.1.4)
- A $\frac{385}{20}$
- B $\frac{385}{17}$
- C $\frac{385}{16}$ (2)
- 1.1.5 Twenty-seven couples booked the luxury double option. Calculate the total amount paid for the trip. (3)

- 1.2 The route of the Blue Train from Pretoria to Kruger National Park, as well as the route from Johannesburg to Cape Town, is shown on ANNEXURE A in the ANSWER BOOK. At the end of the trip, passengers fly back to Johannesburg from Cape Town.

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

- 1.2.1 Name the type of scale used on this map. (2)
- 1.2.2 Explain what the scale on the map represents (2)
- 1.2.3 The distance from Johannesburg to Cape Town is 1 397 km. Convert this distance to centimetres. (2)
- 1.2.4 If a traveler covers 700 km per day from Johannesburg to Cape Town, calculate how many days the journey will take. (2)
- 1.2.5 Determine the number of nights spent on the train during the trip, as shown on ANNEXURE A. (2)

[21]

QUESTION 2

- 2.1 ANNEXURE B in the ANSWER BOOK shows the top view of a house floor plan. The dimensions are given in feet.

NOTE: 1 foot = 30,48cm

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

- 2.1.1 Determine the number of windows shown on the floor plan. (2)
- 2.1.2 Identify the rooms of the house that receive the afternoon sun. (2)
- 2.1.3 State whether the door opens to the (left/right) as you enter the living room. (2)
- 2.1.4 Convert the width of the floor plan from feet to centimetres. (2)
- 2.1.5 Use your answer from Question 2.1.4 to determine the number scale of the floor plan. Round your answer to the nearest whole number. (4)

- 2.2 A tourist travels from Cape Town to Port Elizabeth and makes two stops along the route. The route from Cape Town to Port Elizabeth is shown on the strip map on ANNEXURE C in the ANSWER BOOK.

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

- 2.2.1 List the national roads shown on the map. (3)
- 2.2.2 Explain the difference between a national road and a regional road. (2)
- 2.2.3 A tourist travelling from Cape Town to Port Elizabeth stops at the town closest to the halfway point. Identify the town where he stopped and the distance, he travelled to reach it. (2)
- 2.2.4 The tourist then visits St Francis Bay. Determine the distance in kilometres from the halfway stop to St Francis Bay. (3)
- 2.2.5 The tourist stated that he travelled a total distance of 1 602 km after visiting St Francis Bay and Port Elizabeth and returning to Cape Town the next day.

Verify, with calculations, whether the statement is VALID. (3)

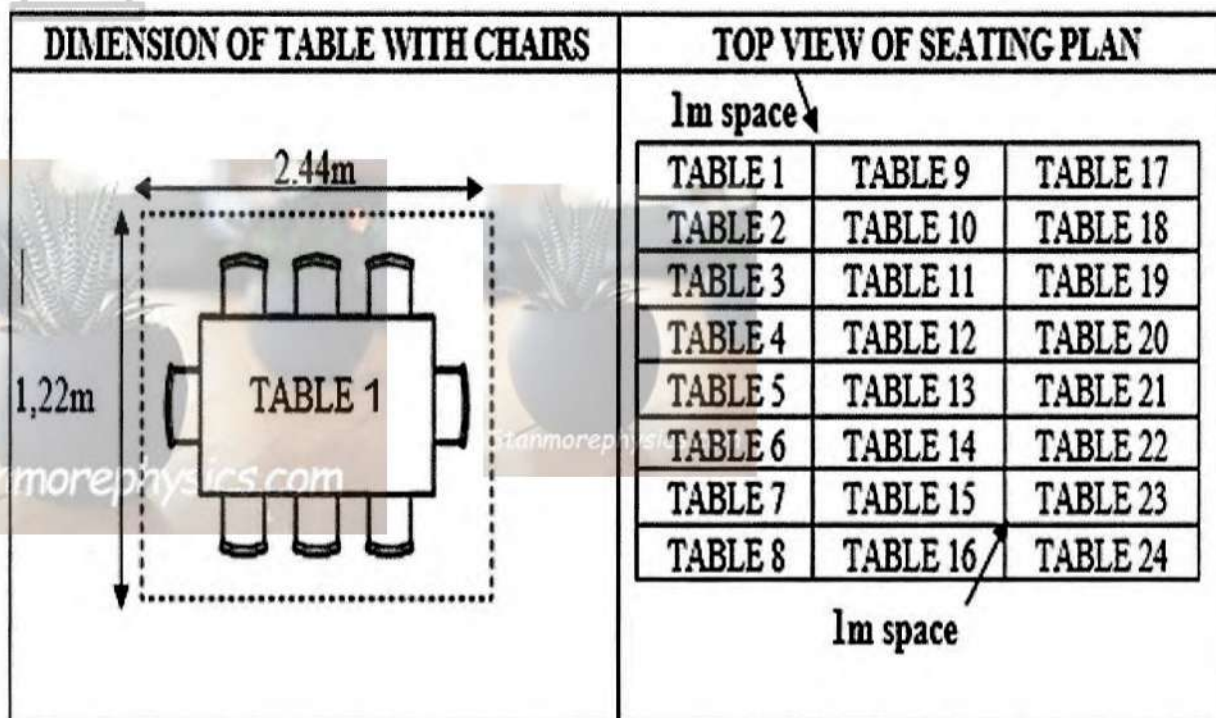
[25]

QUESTION 3

3.1

An event planner is arranging seating according to the layout plan shown below for a party at a venue. The diagram illustrates the dimensions of one table with chairs, as well as the top view of the seating plan.

NOTE: A 1 metre space is left between tables along both the length and the width of each table.



[Source: www.dimensions.com]

Use the images and the information above to answer the questions that follow.

3.1.1 Calculate the number of people that can be seated at the venue. (2)

3.1.2 Determine the total length and the total width of the seating plan. (6)

3.1.3 Calculate the perimeter of the seating plan.

You may use the following formula:

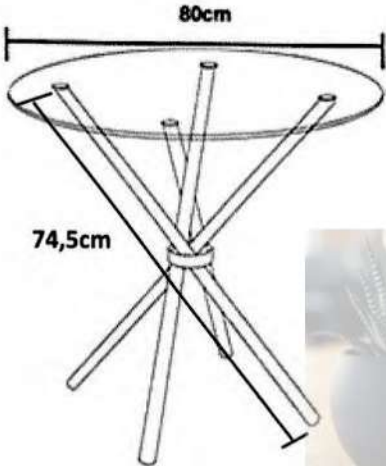
Perimeter of a rectangle = 2 (length + width) (2)

3.1.4 Determine the probability, expressed as a percentage, that 180 people will attend the party. (3)

3.1.5 Determine the probability, expressed as a decimal fraction rounded to two decimal places, that the party will be held on a Friday. (3)

3.2

A carpenter intends to use the dimensions of the glass table to construct a wooden table, as shown in the image below. The dimensions of the wooden table will be increased by 20% based on those of the glass table.

CIRCULAR GLASS TABLE	CIRCULAR WOODEN TABLE
 NOTE: Diameter = 80cm Height of the table legs = 74,5cm	

[Source: <https://bit.ly/4vWYOAN>]

Use the images and the information above to answer the questions that follow.

3.2.1 Determine the radius, in centimetres, of the wooden table. (4)

3.2.2 Calculate the area of the wooden tabletop in m^2 .

You may use the formula:

Area of a circle = $3,142 \times \text{radius}^2$ (4)

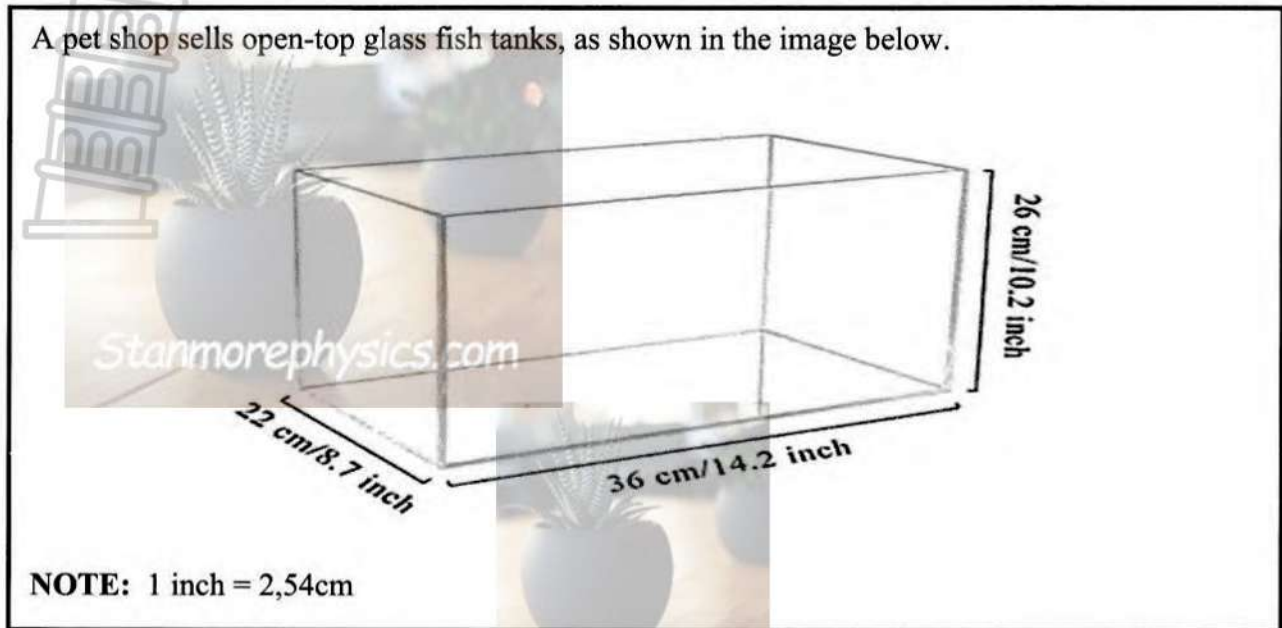
3.2.3 The wooden table legs are sold in lengths of 1,5 m. Determine the number of lengths that must be purchased. (4)

[28]

QUESTION 4

4.1

A pet shop sells open-top glass fish tanks, as shown in the image below.



NOTE: 1 inch = 2,54cm

Use the image and the information above to answer the questions that follow.

4.1.1 Determine the surface area of the fish tank in cm^2 .

You may use the formula:

$$\text{Surface Area} = 2 (\text{Length} \times \text{Width}) + 2 (\text{Length} \times \text{Height}) + 2 (\text{Width} \times \text{Height}) \quad (3)$$

4.1.2 A glass sheet measuring $3210 \text{ mm} \times 2250 \text{ mm}$ is ordered to make the fish tanks. If the thickness of the glass is 0,236 inches, determine the weight of the glass sheet in kilograms.

You may use the formula;

$$\text{Weight of glass} = \text{Length in metres} \times \text{Width in metres} \times \text{Thickness in metres} \times 2\,500 \quad (6)$$

4.1.3 The owner of the pet shop states that 18 fish tanks can be cut from the glass sheet that was ordered.

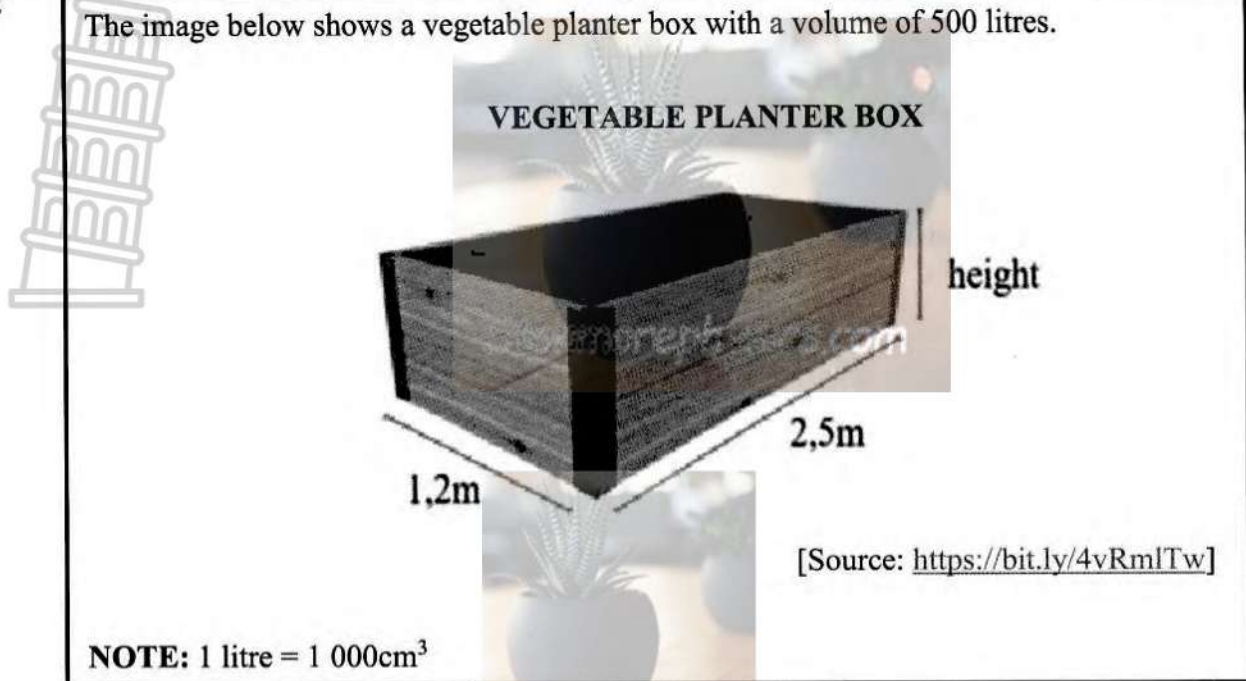
Verify, with calculations, whether this statement is VALID.

You may use the formula:

$$\text{Area} = L \times W \quad (5)$$

4.2

The image below shows a vegetable planter box with a volume of 500 litres.



Use the image and the information above to answer the questions that follow.

4.2.1 Explain the difference between volume and capacity in the context shown above. (2)

4.2.2 The height of the vegetable planter box is 17cm.

Verify, showing all calculations, if this claim is **CORRECT**.

You may use the formula:

Volume = length × width × height (6)

4.2.3 One ton of soil is approximately 750 litres. Determine the number of kilograms of soil required to fill the vegetable planter box. (4)

[26]

TOTAL: 100

EDUCATION
REPUBLIC OF SOUTH AFRICA

JUNE 2026

SURNAME

FIRST NAMES

BOOK NUMBER

OF

BOOKS

GRADE

PAPER NUMBER

2

SUBJECT NAME

MATHEMATICAL LITERACY

MARKER					MODERATOR'S INITIALS IN RELEVANT BLOCK											
Question	Marks			Marker's Initials	Marks	DH	Marks	CM	Marks	DM	Marks	PM	Marks	EM		
1																
2																
3																
4																
TOTAL																

READ INSTRUCTIONS ON THE NEXT PAGE.

This answer book consists of 13 pages.

FOLLOW THESE INSTRUCTIONS CAREFULLY.

1. Clearly write your surname and names in the space provided.
2. Answer ALL questions in the spaces provided.
3. No pages may be torn from this answer book.
4. Read the instructions printed carefully which is given in the examination paper.
5. Candidates may not retain an answer book or remove it from the examination room.
6. Answers must be written in black/blue ink as distinctly as possible.
7. Do not write in the margins.
8. If you require additional space for your answers:
 - 8.1 Use the additional space provided at the end of the answer book.
 - 8.2 When answering a question in the additional space, indicate clearly the question number in the column on the left-hand side.
9. Draw a neat line through any work that must not be marked...

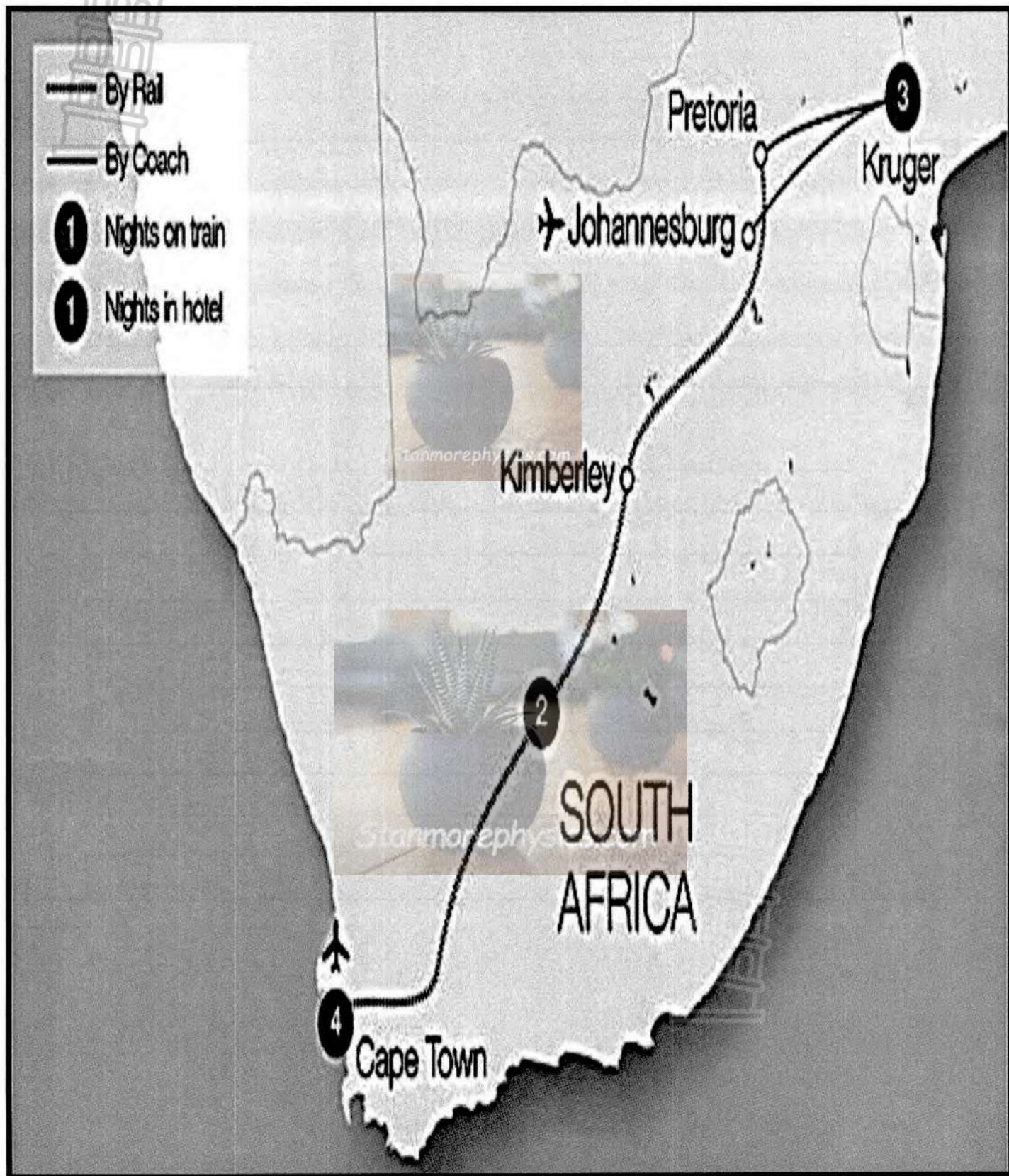
QUESTION 1

	Solution	Marks
1.1.1		(2)
1.1.2		(2)
1.1.3		(2)
1.1.4		(2)
1.1.5		(3)

QUESTION 1.2

ANNEXURE A

MAP OF THE BLUE TRAIN ROUTES IN SOUTH AFRICA



Scale 1: 1 000 000

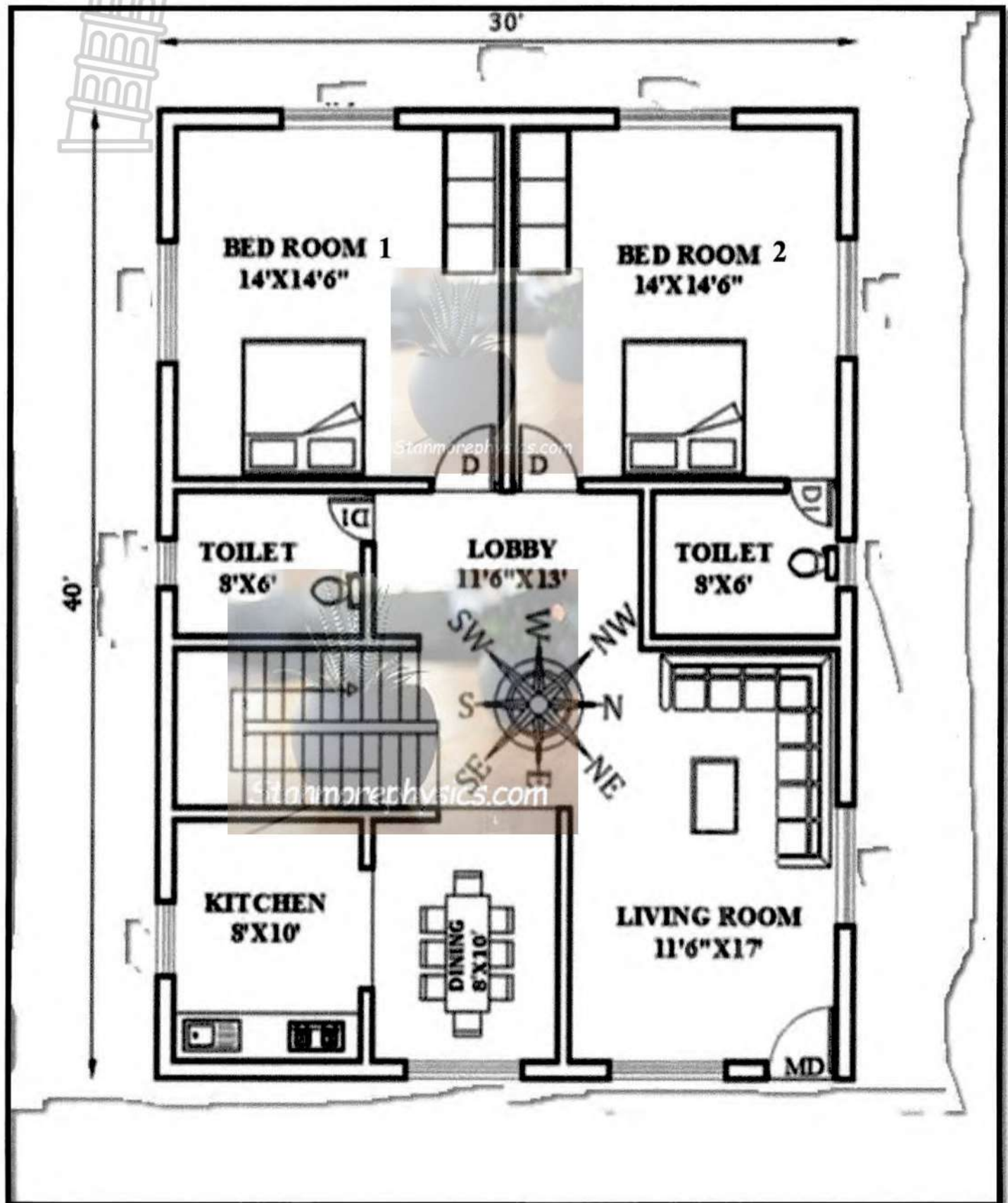
[Source: www.bluewatertouring.com]

1.2.1		(2)
1.2.2		(2)
1.2.3		(2)
1.2.4		(2)
1.2.5		(2)
		[21]

QUESTION 2.1

ANNEXURE B

FLOOR PLAN OF A HOUSE



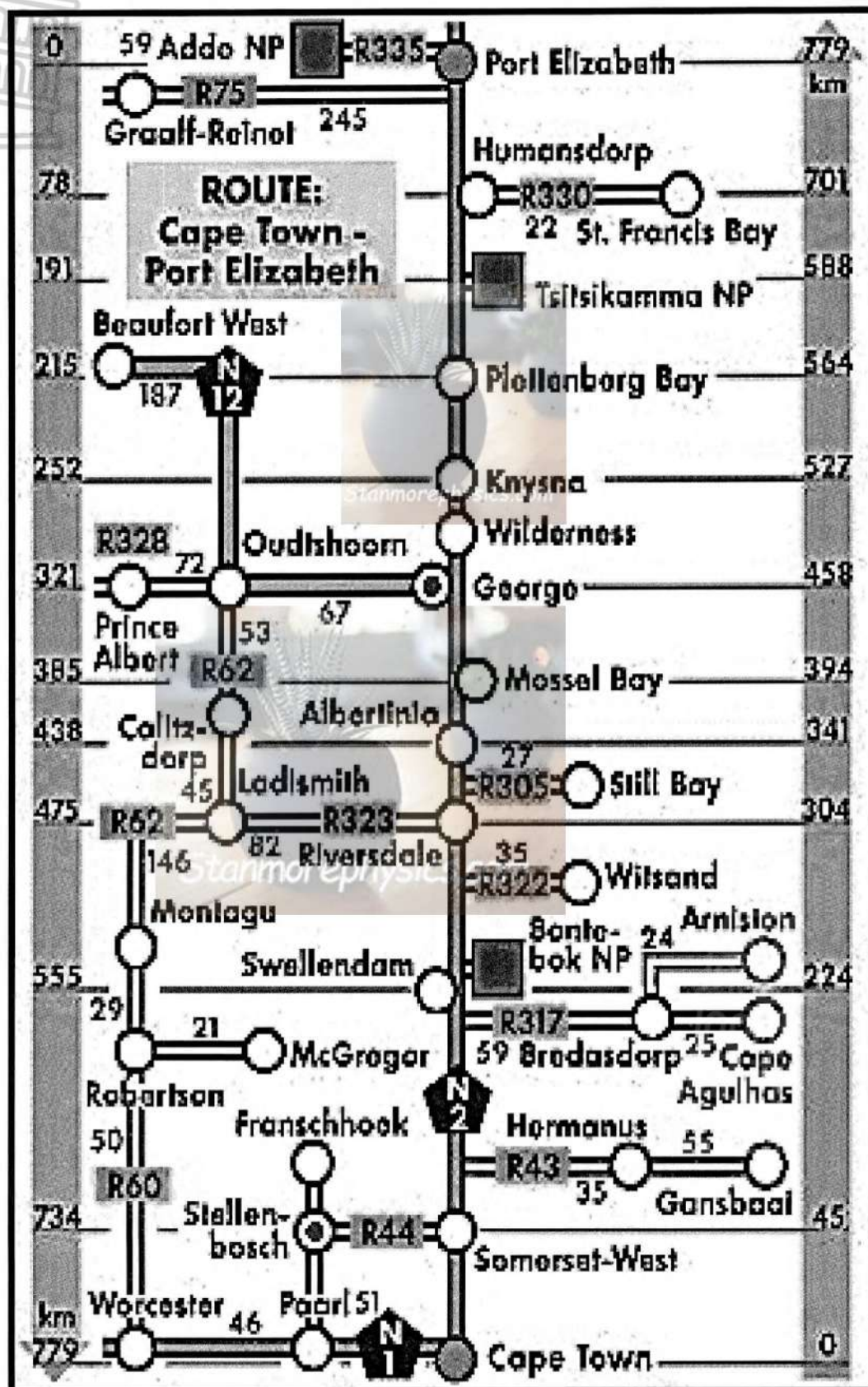
[Adapted source: Pinterest]

	Solution	Marks
2.1.1		(2)
2.1.2		(2)
2.1.3		(2)
2.1.4		(2)
2.1.5		(4)

QUESTION 2.2

ANNEXURE C

STRIP MAP OF CAPE TOWN TO PORT ELIZABETH



[Source: Pinterest]

	Solution	Marks
2.2.1		(3)
2.2.2		(2)
2.2.3		(2)
2.2.4		(3)
2.2.5		(3)
		[25]

QUESTION 3

	Solution	Marks
3.1.1		(2)
3.1.2		
		(6)
3.1.3		(2)
3.1.4		(3)
3.1.5		(3)
3.2.1		(4)
3.2.2		(4)
3.2.3		(4)
		[28]

QUESTION 4

	Solution	Marks
4.1.1		(3)
4.1.2		(6)
4.1.3		(5)

TOTAL: 100



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MARKING GUIDELINES

MARKS: 100

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

These marking guidelines consists of 8 pages

NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out (cancelled) an attempt to a question and NOT redone the solution, mark the crossed out (cancelled) version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guidelines; however, it stops at the second calculation error.
NOTE: consistent accuracy (CA) does not apply in cases of a breakdown.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- As a general marking principal, if a candidate has incurred one mistake and there is evidence of sound mathematics thereafter, then that candidate should lose one mark only.
- Rounding is an independent mark.
- A conclusion mark can only be given if relevant calculations precede it. At least a $\frac{1}{3}$ of the mark before the conclusion.
- No penalty for rounding (NPR) if the decimal is correct, except for questions involving money.

QUESTION 1 [21 MARKS] ANSWER ONLY FULL MARKS			
Q	Solution	Explanation	T&L
1.1.1	Number of years = 2026 – 1923 ✓MA = 103 ✓A	1MA subtracting 1923 1A correct answer (2)	M L1 E
1.1.2	1:00pm ✓✓A	2A correct answer (2)	M L1 E
1.1.3	Duration (Day 1) = 24:00 – 13:00 ✓MA = 11 hours ✓A	1MA subtracting time 1A correct answer (2)	M L1 M
1.1.4	A ✓✓A	2A correct answer. Accept $\frac{385}{20}$ (2)	M L1 M
1.1.5	✓RT Amount paid = R92 335 × 27 × 2 ✓MA = R4 986 090 ✓A	1RT for R 92 335 1MA multiplying 27 by 2 1A correct answer (3)	M L1 D
1.2.1	Number scale/Ratio scale ✓✓A	2A correct answer (2)	MP L1 E

Q	Solution	Explanation	T&L
1.2.2	1 unit on the map represents 1 000 000 units in reality ✓✓O OR 1 unit on the map is one million times larger/bigger in reality. ✓✓O	2O correct explanation OR 2O correct explanation (2)	MP L1 E
1.2.3	Distance = $1\,397 \times 100\,000$ ✓C = 139 700 000 cm ✓A	1C multiplying by 100 000 cm 1A correct answer. (2)	MP L1 E
1.2.4	Total number of days = $1\,397\text{ km} \div 700\text{ km}$ ✓MA = 1,996 = 2 days ✓R	1MA dividing by 700km 1R correct days (2)	MP L1 E
1.2.5	Number of nights = 1 ✓✓RT	2RT correct number (2)	MP L1 E
			[21]

QUESTION 2 [25 MARKS]

Q	Solution	Explanation	T&L
2.1.1	Number of windows = 10 ✓✓A	2A correct answer (2)	MP L1 E
2.1.2	Bedroom 1 and Bedroom 2 ✓✓RT OR Bedrooms 1 and 2 ✓✓RT	2RT reading correct rooms OR 2RT reading correct rooms (2)	MP L2 E
2.1.3	Right ✓✓A	2A correct answer (2)	MP L1 E
2.1.4	Width = $30 \times 30,48$ ✓C = 914,4cm ✓A	1C multiplying by 30,48 1A correct answer (2)	MP L1 E
2.1.5	Measured Length = 13.1cm ✓A 13,1cm : 914,4cm ✓MCA 1 : 69,80 ✓S 1:70 ✓R	CA from 2.1.4 1A measuring length 1MCA concept of scale 1S simplification 1R rounding (4)	MP L3 M

2.2.1	✓RT ✓RT N1, N2 and N12 ✓RT	1RT for N1 1RT for N2 1RT for N12 (3)	MP L1 E
2.2.2	National road connects major cities across provinces. ✓O Regional roads connect smaller towns within a province. ✓O	1O correct explanation 1O correct explanation (2)	MP L1 E
2.2.3	Town = Mossel Bay ✓RT Distance = 394 km ✓RT	1RT for Mossel Bay 1RT for 394 km (2)	MP L2 E
2.2.4	✓MCA Distance = $(701 \text{ km} - 394 \text{ km}) + 22 \text{ km}$ ✓MA = 329 km ✓CA	CA from 2.2.3 1MCA subtracting 394km 1MA adding 22 km 1CA correct answer (3)	MP L2 E
2.2.5	✓MA Total distance = $(779 \text{ km} \times 2) + 22 \text{ km} + 22 \text{ km}$ ✓MA = 1 602km Statement is valid ✓O OR ✓MA ✓MA Total distance = $701 \text{ km} + (22 \text{ km} \times 2) + 78 \text{ km} + 779 \text{ km}$ = 1 602km Statement is valid ✓O	1MA multiplying by 2 1MA adding 44 km 1O conclusion OR 1MA multiplying by 2 1MA adding correct distances 1O conclusion (3)	MP L4 M
		[25]	

QUESTION 3 [28 MARKS]			
Q	Solution	Explanation	T&L
3.1.1	Number of people = 8×24 ✓MA = 192 ✓A	1MA multiplying by 24 1A correct answer (2)	M L1 E
3.1.2	Width = $(3 \times 2,44) + 2\text{m}$ = 9,32m ✓CA Length = $(8 \times 1,22) + 7\text{m}$ = 16,76m ✓CA	1MA multiplying by 3 1MA adding 2m 1CA answer 1MA multiplying by 8 1MA adding 7m 1CA answer (6)	M L2 M
3.1.3	Perimeter = $2(16,76\text{ m} + 9,32\text{m})$ ✓SF = 52,16m ✓CA	CA from 3.1.2 1SF substitution 1CA correct answer (2)	M L2 E
3.1.4	Probability = $\frac{180 \checkmark A}{192 \checkmark CA} \times 100\%$ = 93,75% ✓CA	CA from 3.1.1 1A for Numerator 1CA for Denominator 1CA answer (3)	P L2 E
3.1.5	Probability = $\frac{1 \checkmark A}{7 \checkmark A}$ = 0,14 ✓R	1A for Numerator 1A for Denominator 1R Rounding (3)	P L2 E
3.2.1	Diameter = $(80\text{ cm} \times \frac{120}{100})$ ✓MA = 96 cm ✓A Radius = $96 \div 2$ ✓MA = 48cm ✓CA OR Radius = $80\text{ cm} \div 2$ ✓MA = 40 cm ✓A = $40 \times \frac{120}{100}$ ✓MA = 48cm ✓CA	1MA multiplying by 120 and dividing by 100. 1A correct answer 1MA dividing by 2 1CA correct answer OR 1MA dividing by 2 1A correct answer 1MA multiplying by 120 and dividing by 100 1CA correct answer (4)	M L2 M

Q	Solution	Explanation	T&L
3.2.2	Convert to m = $48 \div 100 \checkmark C$ $= 0,48m \checkmark CA$ Area = $(3,142 \times 0,48^2) \checkmark SF$ $= 0,72m^2 \checkmark CA$ OR Area = $(3,142 \times 48^2) \checkmark SF$ $= 7\,239,168cm^2 \checkmark CA$ Convert to $m^2 = 7\,239,168cm^2 \div 100^2 \checkmark C$ $= 0,72\,m^2 \checkmark CA$	CA from 3.2.1 1C dividing by 100 1CA correct answer 1SF substitution 1CA correct answer OR 1SF substitution 1CA correct answer 1C dividing by 10 000 1CA correct answer (4)	M L2 M
3.2.3	Height of leg = $74,5cm \times \frac{120}{100} \checkmark MA$ $= 89,4\,cm \checkmark A$ Number of lengths per 1,5m = $1,5m \div 0,894m \checkmark C$ $= 0,606m$ Therefore, number of 1,5m lengths required = 4 $\checkmark A$ OR Height of leg = $(74,5cm \times \frac{20}{100}) + 74,5cm \checkmark MA$ $= 89,4\,cm \checkmark A$ Number of lengths per 1,5m = $1,5m \div 0,894m \checkmark C$ $= 0,606m$ Therefore, number of 1,5m lengths required = 4 $\checkmark A$ OR Height of leg = $74,5cm \times \frac{120}{100} \checkmark MA$ $= 89,4\,cm \checkmark A$ Number of lengths per 1,5m = $1,5m \div 0,894m \checkmark C$ $= 1,67785m$ Therefore, number of 1,5m lengths required = 4 $\checkmark A$	1MA percentage increase concept 1A correct answer 1C Conversion 1A correct answer OR 1MA percentage increase concept 1A correct answer 1C Conversion 1A correct answer OR 1MA percentage increase concept 1A correct answer 1C Conversion 1A correct answer (4)	M L3 M
		[28]	

QUESTION 4 [26 MARKS]			
Q	Solution	Explanation	T & L
4.1.1	$SA = (36\text{cm} \times 22\text{cm}) + 2(36\text{cm} \times 26\text{cm}) + 2(22\text{cm} \times 26\text{cm})$ $= 3808 \text{ cm}^2$	$\checkmark$ MA $\checkmark$ SF 1MA multiplying 36 by 22 1SF correct substitution 1CA correct answer (3)	M L2 M
4.1.2	Length of Glass $= 3\,210 \div 1000$ $\checkmark$ C $= 3,210\text{m}$ $\checkmark$ A Width Of Glass $= 2\,250 \div 1000$ $= 2,25\text{m}$ Thickness of the Glass $= (0,236 \times 2,54) \div 100$ $\checkmark$ C $\checkmark$ C $= 0,0059944 \text{ m}$ Weight (in kg) $= 3,210 \times 2,25 \times 0,0059944 \times 2500$ $\checkmark$ SF $= 108,24 \text{ kg}$ $\checkmark$ CA	1C dividing by 1000 1A correct answer 1C multiplying by 2,54 1C dividing by 100 1SF substitution 1CA correct answer (6)	M L3 M
4.1.3	Length of Glass $= 3\,210 \div 10$ $= 321 \text{ cm}$ $\checkmark$ C Width of glass $= 2\,250 \div 10$ $= 225 \text{ cm}$ Area of the glass $= 321\text{cm} \times 225 \text{ cm}$ $\checkmark$ SF $= 72\,225\text{cm}^2$ Number of tanks $= 72\,225 \text{ cm}^2 \div 3\,808 \text{ cm}^2$ $\checkmark$ MCA $= 18,97$ $= 18$ $\checkmark$ RCA The statement is VALID $\checkmark$ O OR Area of the glass $= 3210\text{mm} \times 2250\text{mm}$ $\checkmark$ SF $= 7\,222\,500\text{mm}^2 \div 10^2$ $\checkmark$ C Number of tanks $= 72\,225 \text{ cm}^2 \div 3\,808 \text{ cm}^2$ $\checkmark$ MCA $= 18,97$ $= 18$ $\checkmark$ RCA The statement is VALID $\checkmark$ O	CA from 4.1.1 1C conversion to cm 1SF correct substitution 1MCA for diving by 3 808 1RCA rounding 1O conclusion OR 1SF correct substitution 1C conversion to cm^2 1MCA for diving by 3 808 1RCA rounding 1O conclusion (5)	M L4 M

4.2.1	Volume is the space the 3D planter box takes up ✓O Capacity is amount of soil the planter box can hold ✓O	1O correct explanation 1O correct explanation (2)	M L1 E
4.2.2	500 litres = 500 000cm³ ✓C ✓C 500 000cm³ = 120 × 250 × height ✓SF Height = $\frac{500\,000}{120 \times 250}$ ✓MA = 16,67cm ✓CA Claim is incorrect ✓O	1C convert to cm³ 1C correct conversion both dimensions to cm 1SF correct substitution 1MA changing the subject of the formula 1CA correct answer 1O conclusion (6)	M L4 D
4.2.3	Number of tons = 500 ÷ 750 ✓MA = 0,66667 ✓A Number of kilograms = 0,6667 × 1000 ✓C = 666,67 ✓CA OR 1 000kg = 750 ℓ ✓C ? kg = 500 ℓ ✓C ? kg = $\frac{500 \times 1\,000}{750}$ ✓MA = 666,67 kg ✓CA	1MA dividing by 750 1A correct answer 1C conversion to kg 1CA correct answer OR 1C conversion factor 1C conversion to kg 1MA dividing by 750 1CA correct answer NPR (4)	M L2 M
		[26]	
TOTAL MARKS 100			