Downloaded from Stanmorephysics.com

education

MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P2

SEPTEMBER 2026

Stanmorephysics.com

MARKS: 150

TIME: 3 HOURS

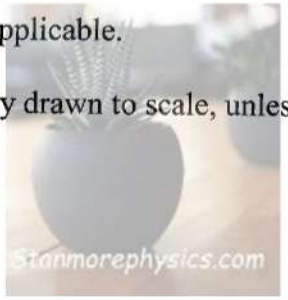
This question paper consists of 14 pages and an 18-page SPECIAL ANSWER BOOK.

Copyright reserved

Downloaded from Stanmorephysics.com

INSTRUCTIONS AND INFORMATION

1. This question paper consists of **FIVE** questions. Answer **ALL** the questions.
2. Answer ALL the questions ONLY 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.



Copyright reserved

Downloaded from Stanmorephysics.com

QUESTION 1

1.1 Maps and plans may use a scale to show the proportion between the measurement on the paper and the actual measurement.

1.1.1 In a scale of 1: 200 000, what does the 200 000 represents. (2)

1.1.2 Identify the type of scale that increases or decreases with a map when it is resized. (2)

1.2 TABLE 1 below contains a list of Mathematical Literacy terms or concepts in COLUMN A with descriptions in COLUMN B.

Choose a description from COLUMN B that matches the term or concept in COLUMN A. Write only the letter (A – K) next to the question numbers (1.2.1 to 1.2.6) In the ANSWER BOOK, e.g. 1.2.6 Z

TABLE 1: MATHEMATICAL LITERACY TERMS OR CONCEPTS WITH DESCRIPTIONS

	COLUMN A	COLUMN B
1.2.1	Unit for speed	A distance from the centre of a circle to the outer part of the circle.
1.2.2	Radius	B hour per kilometre.
1.2.3	Perimeter	C imperial
1.2.4	Layout Plan	D kilometres per hour
1.2.5	Conversion from cm^2 to m^2	E distance around the boundary of a shape
1.2.6	The system of measurement that uses grams and kilograms.	F outside of a building as seen from a side view.
		G 10 000
		H straight line that passes through the centre of a circle whose endpoints lie on the circle.
		I 100
		J Arrangement and design of features inside a building.
		K metric

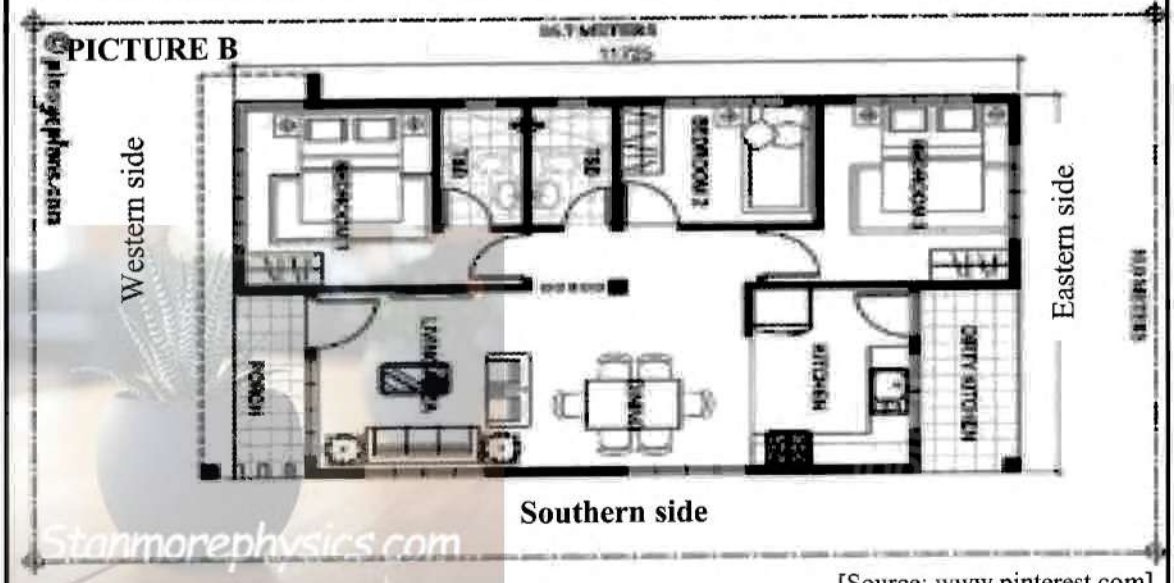
(6×2) (12)

Downloaded from Stanmorephysics.com

1.3 Below are pictures of house plans.

PICTURE A

PICTURE B



[Source: www.pinterest.com]

Use the pictures above to answer the questions that follow.

1.3.1 Write down the name of the house plan shown in PICTURE B. (2)

1.3.2 Identify the side on Picture B which represents the side labelled Z in Picture A. (2)

1.3.3 Choose the correct word to make the statement true.
The house plan in PICTURE A is ……(2Dimensional / 3Dimensional) (2)

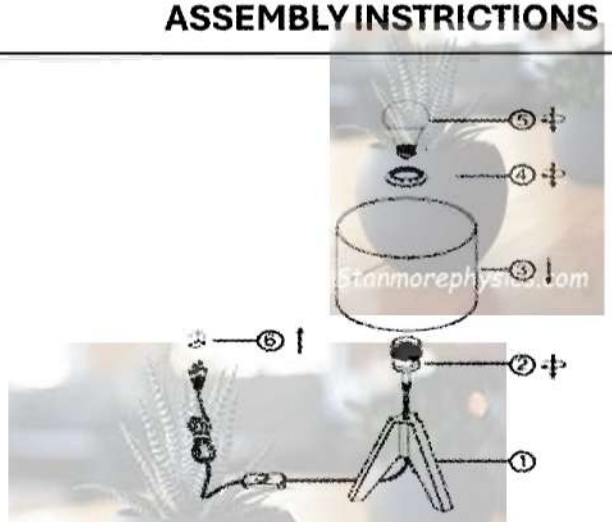
Downloaded from Stanmorephysics.com

1.4 Below is information on assembling a lamp shade.
Use the diagram to answer the following questions.

DIAGRAM TO ASSEMBLY A LAMP SHADE

Part	Description
1	Linen Shades
2	Socket Ring
3	Table Lamp
4	Instruction Manual

ASSEMBLY INSTRICTIONS



Stanmorephysics.com

1.4.1 Write down the name of part number 2. (2)

1.4.2 Name the part on the list which has the instructions on how to assembly a lamp shade. (2)

1.4.3 The circumference of the lamp shade is 125,68 cm. Write down the letter that represents a formula used to calculate the circumference.

A. $\pi \times \text{radius}^2 \times \text{height}$
B. $2 \times \pi \times \text{radius}$
C. $\pi \times \text{radius}^2$ (2)

1.4.4 State whether the statement below is TRUE or FALSE.

"Tightening items on the lamp shade is done in an anticlockwise direction." (2)
[30]

Downloaded from Stanmorephysics.com

QUESTION 2

2.1 ANNEXURE A in the ANSWER BOOK shows a seating plan of a cinema. Mandisa and her mother went to watch a movie in this cinema.

Use ANNEXURE A to answer the questions that follow.

2.1.1 Define the term seating plan. (2)

2.1.2 Determine the general direction of seat G14 from the entry point. (2)

2.1.3 On that day, the cinema was 60% full. Mandisa stated that more than 60 seats were unoccupied in the cinema.

Verify with calculations whether her statement is VALID. (5)

2.1.4 They bought tickets to sit on the two middle seats on the 6th row from the entry point.

Identify the seat numbers. (3)

2.1.5 Write down the feature on the plan that shows that the cinema is wheelchair friendly. (2)

2.1.6 One of the cinema goers was allocated seat number E9. Describe the directions to get to her seat from the entry point. (5)

2.2 The cinema offers the following snack options:

Popcorn	**Drinks**	**Sweets**	
Large (L)	Slush (S)	Jelly tots (J)	
Regular (R)	Cold drink (C)	Smarties (T)	
	Water (W)		

Use the table above and the tree diagram on ANNEXURE B to answer the following questions.

2.2.1 Write down the total number of snack combinations available. (2)

2.2.2 Complete the missing information on the tree diagram. (3)

2.2.3 Determine (as a percentage) , the probability of buying jelly tots. (3)

[27]

Downloaded from Stanmorephysics.com

QUESTION 3

3.1 Zinzi runs a business of renting out trampolines for kiddies parties.

ANNEXURE C in the ANSWER BOOK shows a picture of a trampoline.

Use ANNEXURE C to answer the questions that follow.

3.1.1 Show that the width of the pad is 0,35 m. (2)

3.1.2 Determine to the nearest m^2, the area of the jumping mat.

You may use the following formula:

Area of a circle = 3,142 × radius ^{2} (4)

3.1.3 Give a reason of having a net around the trampoline. (2)

3.1.4 Zinzi stated that the area occupied by the pads on the trampoline is less than 4 m^2

Verify, showing ALL calculations , if her statement is VALID.

You may use the following formula:

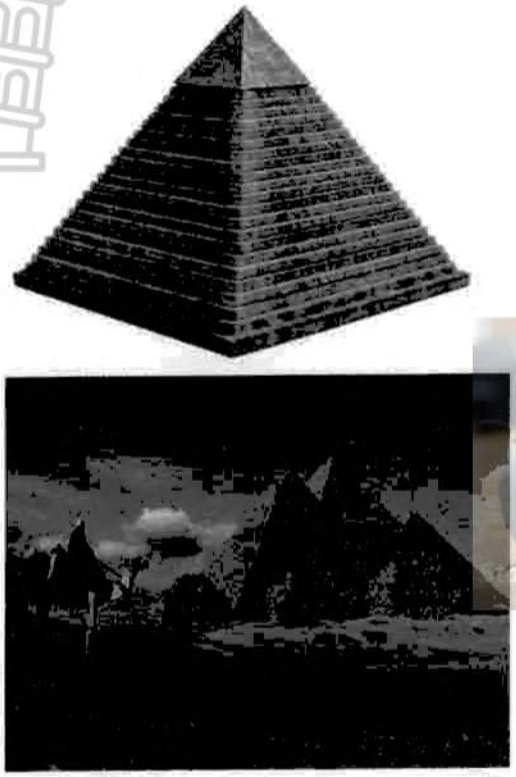
Area of a circle = 3,142 × radius ^{2} (6)

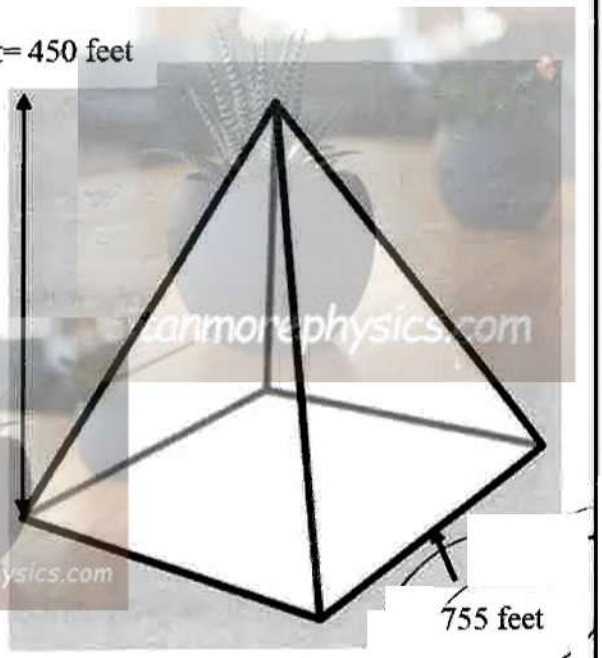
Stanmorephysics.com

Downloaded from Stanmorephysics.com

3.2 The Great Pyramid of Giza located in Egypt is 450 feet tall and has a base of 755 feet.

PICTURE OF THE GREAT PYRAMID	DIAGRAM OF THE GREAT PYRAMID OF GIZA





NOTE: 1 foot : 30,48 cm

1 cubic foot = 28,3168466 litres.

1 tonne = 1 000 kg

$1m^3$ = 1 000 litres

[Source: https://en.wikipedia.org]

Use the information above to answer the questions that follow.

3.2.1 Determine in cm^2, the area of the base of the The Great Pyramid.

You may use this formula : **Area = side × side** (4)

3.2.2 Calculate in $feet^2$, the total surface area of the exposed parts of the pyramid. Round off your answer to the nearest ten thousands.

You may use the following formula:

Area = ½ base × height (5)

Downloaded from Stanmorephysics.com

3.3 The Great Pyramid of Giza is built using stones. Each stone weighs 2,5 tonnes. The pyramid is made of 2,3 million stones.

The volume of the pyramid is 2,6 million cubic meters.

3.3.1 Determine the total weight of the stones in kilograms. (4)

3.3.2 Convert the volume of the Pyramid to cubic feet. (5)
[32]

Downloaded from Stanmorephysics.com

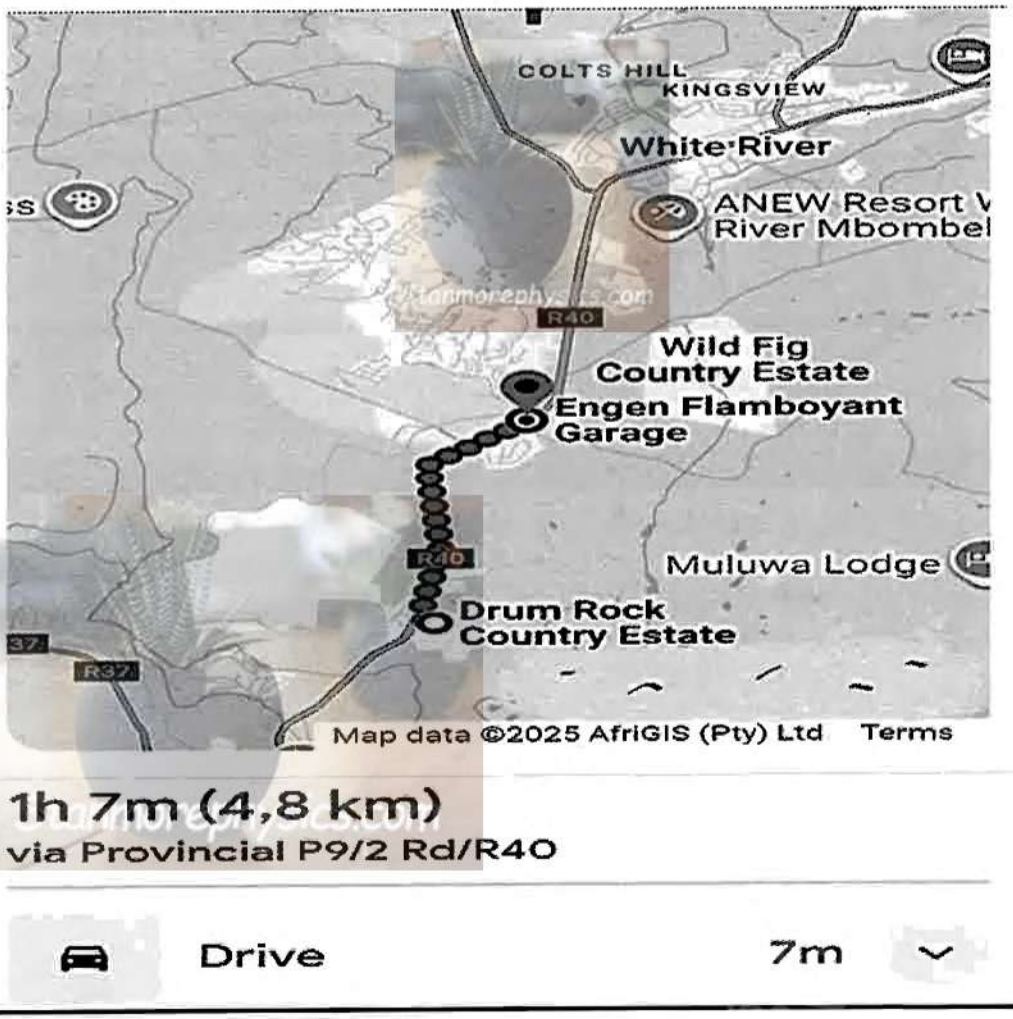
QUESTION 4

4.1 The Mashele family lives in Drum Rock Country Estate. They take a walk to Engen Flamboyant filling station in Rocky Drift.

A part their walk is shown below in the map.

Use the map to answer the questions that follow.

PART OF MAP FROM DRUM ROCK COUNTRY ESTATE TO ENGEN FLAMBOYANT



4.1.1 Write down the name of the regional road used by the Mashele family. (2)

4.1.2 Mr Mashele stated that his family walk at an average speed of more than 5 km/hr.

Verify, showing ALL calculations whether the statement is VALID.

You may use this formula: $\textbf{Speed} = \frac{\textbf{Distance}}{\textbf{Time}}$ (5)

Downloaded from Stanmorephysics.com

4.1.3 Mrs Mashele has a height of 165 cm and a weight of 87 kg, Determine her weight status.

You may use the following formula:

$$\textbf{BMI} = \frac{\textbf{weight (kg)}}{\textbf{height} \times \textbf{height (m}^2\textbf{)}}$$

(4)

4.2

The Mashele family own a TV stand. The thickness of all the boards used on the TV stand is 15 mm. A picture of the TV stand is shown on ANNEXURE D in the ANSWER BOOK.

Use the information above and ANNEXURE D to answer the following questions.

4.2.1 Determine the total area available to hold the TV.

You may use this formula: **Area = length × width** (7)

4.2.2 The Mashele family intends buying a new TV with a height of 36,8 inches and a length of 65,4 inches. Show that the area of the new TV is 15 527,19 cm^2.

You may use this formula: **Area = length × width**

NOTE: 1 inch = 2,54 cm (4)

4.2.3 Determine, in m^3, the volume of the brown boards on the TV stand.

You may use this formula: **Volume = length × width × height** (6)

[28]

Downloaded from Stanmorephysics.com

QUESTION 5

5.1 Articulated trucks are used to transport coal from Belfast Mpumalanga to the harbour of Maputo in Mozambique for export to other countries.

- An average of 3 000 trucks transport coal from Belfast to Maputo each day.
- The weight of a loaded truck is 48 tonnes.
- A truck without the trailer weighs 10 000 kg
- Each empty trailer weighs 13 600 kg

NOTE: 1 tonne = 1000 kg

- **Articulated truck is a heavy vehicle with pivot joint between its front and rear trailers.**

PICTURE OF AN ARTICULATED TRUCK TRANSPORTING COAL

[Source adapted from: www.csrf.ac.uk]

Use the information above to answer the questions that follow.

5.1.1 A truck driver stated that the harbour receives more than 30 000 tonnes of coal from South African articulated trucks per day.

Verify, showing ALL calculations, whether the claim is CORRECT. (7)

5.1.2 The Maputo harbour exports 205 000 tonnes of coal per month.
The Supervisor claimed that the trucks need 7 days to deliver enough coal to be exported.

Verify, showing ALL calculations, whether the claim is VALID. (3)

Downloaded from Stanmorephysics.com

5.2 A train is an alternative way of transporting coal from South Africa to the Maputo harbour.

A picture of a train with wagons is shown below.

PICTURE OF A TRAIN TRANSPORTING COAL

Source: Adapted from https://www.news24.com

- One train wagon holds a maximum of 1 200 tonnes of coal.
- The density of coal is 1,1 g/cm^3

Determine in m^3, the capacity of coal in each train wagon.

You may use the following formula:

Density = Mass ÷ volume

NOTE:
1 tonne = 1000 kg
1 kg = 1 000 grams
1 m^3 = 1000 000 cm^3

(7)

Downloaded from Stanmorephysics.com

5.3 The University of Western Cape has a Nature Reserve Unit, used by the university staff, students as well as the surrounding community for educational and recreational purposes.

ANNEXURE E in the ANSWER BOOK shows a map of the UWC Nature Reserve Unit.

[Source: www.uwc.ac.za]

Use the Map on ANNEXURE E to answer the questions that follow.

5.3.1 Write down the number of picnic areas shown on the map. (2)

5.3.2 Determine in minutes, the duration on which the Nature Reserve is opened in a week. (3)

5.3.3 Suggest two courses offered by the university which uses the nature reserve as a source for educational purposes. (2)

5.3.4 A visitor in a car uses entry point gate 1 & 2 going to the Cape Flats Dune Strandveld.

(a) Write down the name of the street. (2)

(b) Why would the car driver not use his car for the entire trip. (2)

5.4 The University of Western Cape is located in Bellville,

- The total population of Bellville in 2011 was 112 507.
- The population in 2025 is 27,6% more than the population in 2011.
- The total area of Bellville is 52,39 km^2.

The Municipality claimed that the population density in 2025 is 2 470/km^2.

Verify, showing ALL calculations, whether the claim is VALID. (5)

[33]

TOTAL: 150

Copyright reserved

Downloaded from Stanmorephysics.com

education
MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA

NSC ANSWER BOOK

Stanmorephysics.com

SCHOOL NAME:	DISTRICT:
NAME & SURNAME:	CLASS:
DATE:	
SUBJECT	MATHEMATICAL LITERACY P2

MARKER																					
Question	Marks			Initials	Marks			DH	Marks			C/D	Marks			PROV	Marks			EXT
1																				
2																				
3																				
4																				
5																				
TOTAL																				

This answer book consists of 18 pages.

Copyright reserved

Downloaded from Stanmorephysics.com

FOLLOW THESE INSTRUCTIONS CAREFULLY

1. Clearly write your SURNAME and NAME(s) in the space provided.
2. Answer ALL the questions in the spaces provided.
3. No pages may be torn from this answer book.
4. Read the instructions which may be 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. Pencils may be used for drawing graphs.
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 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.

Downloaded from Stanmorephysics.com

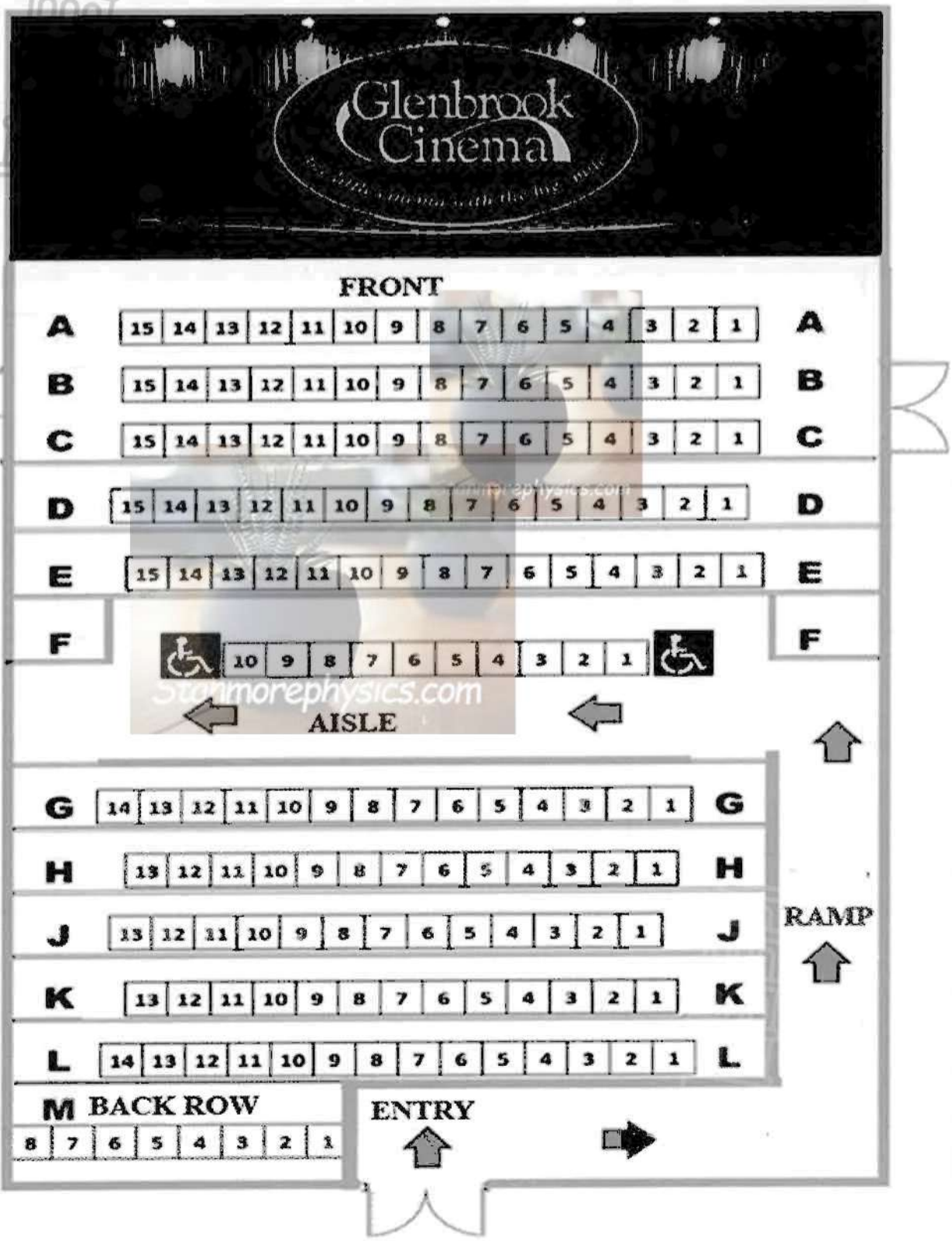
QUESTION 1		
	Solution	**Marks**
1.1.1		(2)
1.1.2		(2)
1.2.1		(2)
1.2.2		(2)
1.2.3		(2)
1.2.4		(2)
1.2.5		(2)
1.2.6		(2)
1.3.1		(2)
1.3.2		(2)
1.3.3		(2)
1.4.1		(2)
1.4.2		(2)
1.4.3		(2)
1.4.4		(2)
		[30]

Stanmorephysics.com

Downloaded from Stanmorephysics.com

QUESTION 2

ANNEXURE A – SEATING PLAN OF A CINEMA



NOTE: Back entrance is on the south.

Downloaded from Stanmorephysics.com

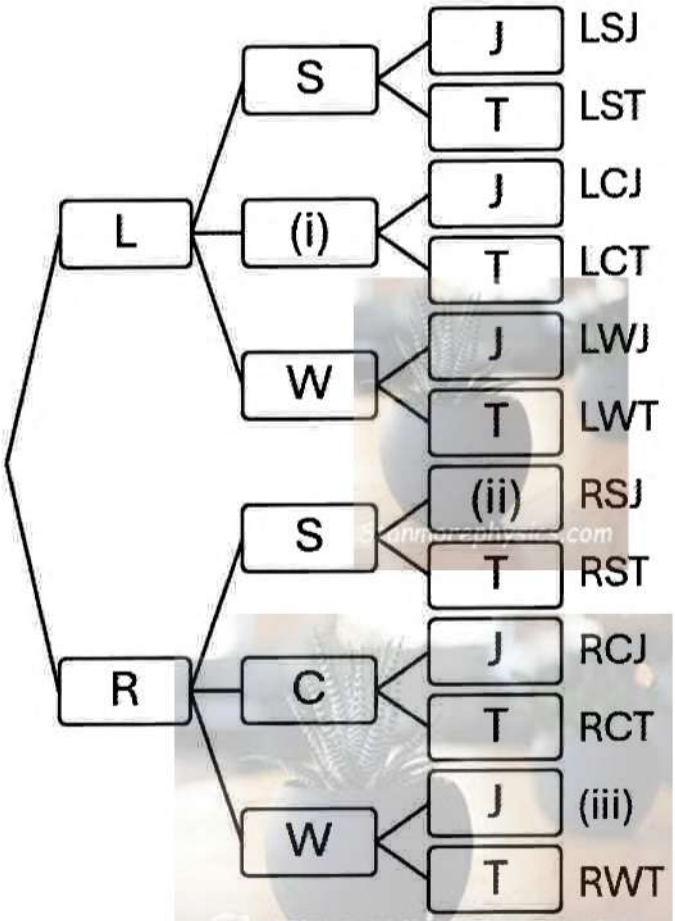
	Solution	Marks
2.1.1		(2)
2.1.2		(2)
2.1.3		(5)
2.1.4		(3)
2.1.5		(2)
2.1.6		(5)

Stanmorephysics.com

Downloaded from Stanmorephysics.com

QUESTION 2.2

ANNEXURE B: TREE DIAGRAM



2.2.1			(2)
2.2.2	(i)		(3)
	(ii)		
	(iii)	(1 × 3)	
2.2.3			(3)
			[27]

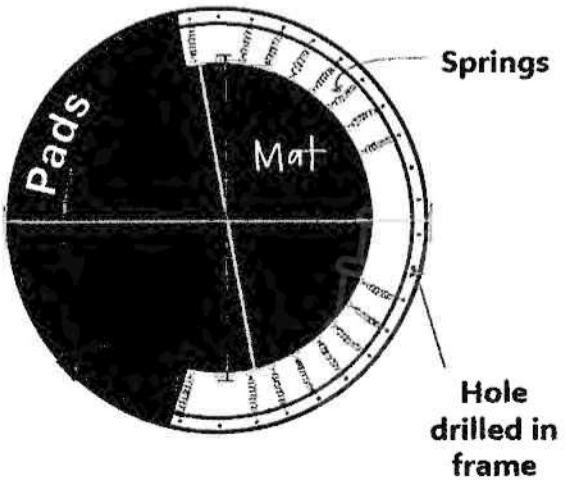
Downloaded from Stanmorephysics.com

QUESTION 3

ANNEXURE C

PICTURE OF THE BASE OF A CYLINDRICAL TRAMPOLINE.

PICTURE OF THE SIDE VIEW AND TOP VIEW OF THE TRAMPOLINE.



Downloaded from Stanmorephysics.com

	Solution	Marks
3.1.1		(2)
3.1.2		(4)
3.1.3		(2)
3.1.4		(6)

Stanmorephysics.com

Downloaded from Stanmorephysics.com

3.2.1		(4)
3.2.2		(5)

Stanmorephysics.com

Downloaded from Stanmorephysics.com

3.3.1		(4)
3.3.2		(5)
		[32]

Stanmorephysics.com

Downloaded from Stanmorephysics.com

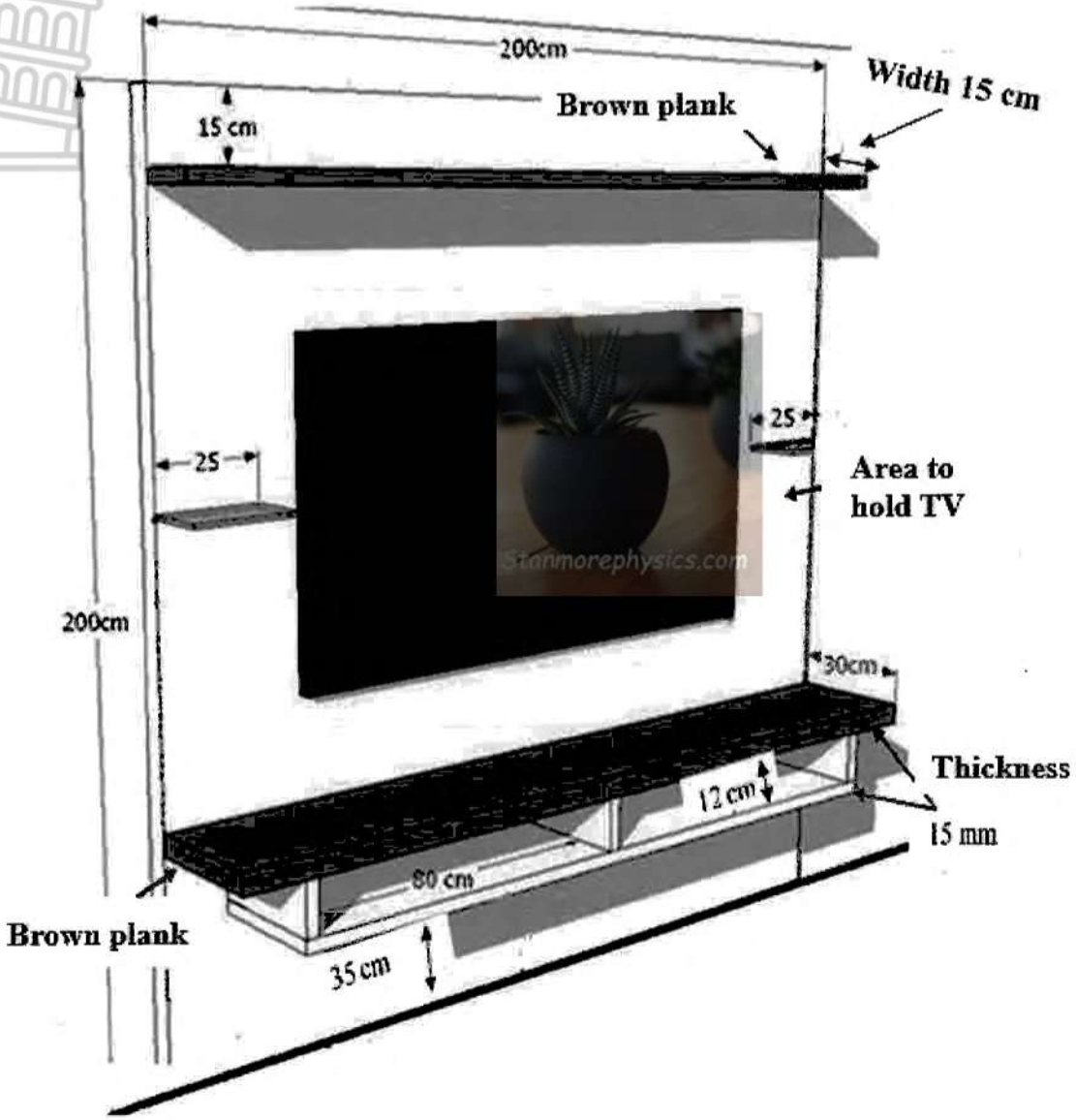
QUESTION 4		
	Solution	**Marks**
4.1.1		(2)
4.1.2		(5)
4.1.3		(4)

Stanmorephysics.com

Downloaded from Stanmorephysics.com

QUESTION 4.2

ANNEXURE D: PICTURE OF A TV STAND



[Source: adapted from www.pinterest.com]

NOTE: 1 inch = 2,54 cm

Downloaded from Stanmorephysics.com

4.2.1		(7)
4.2.2		(4)
4.2.3		(6)
		[28]

Downloaded from Stanmorephysics.com

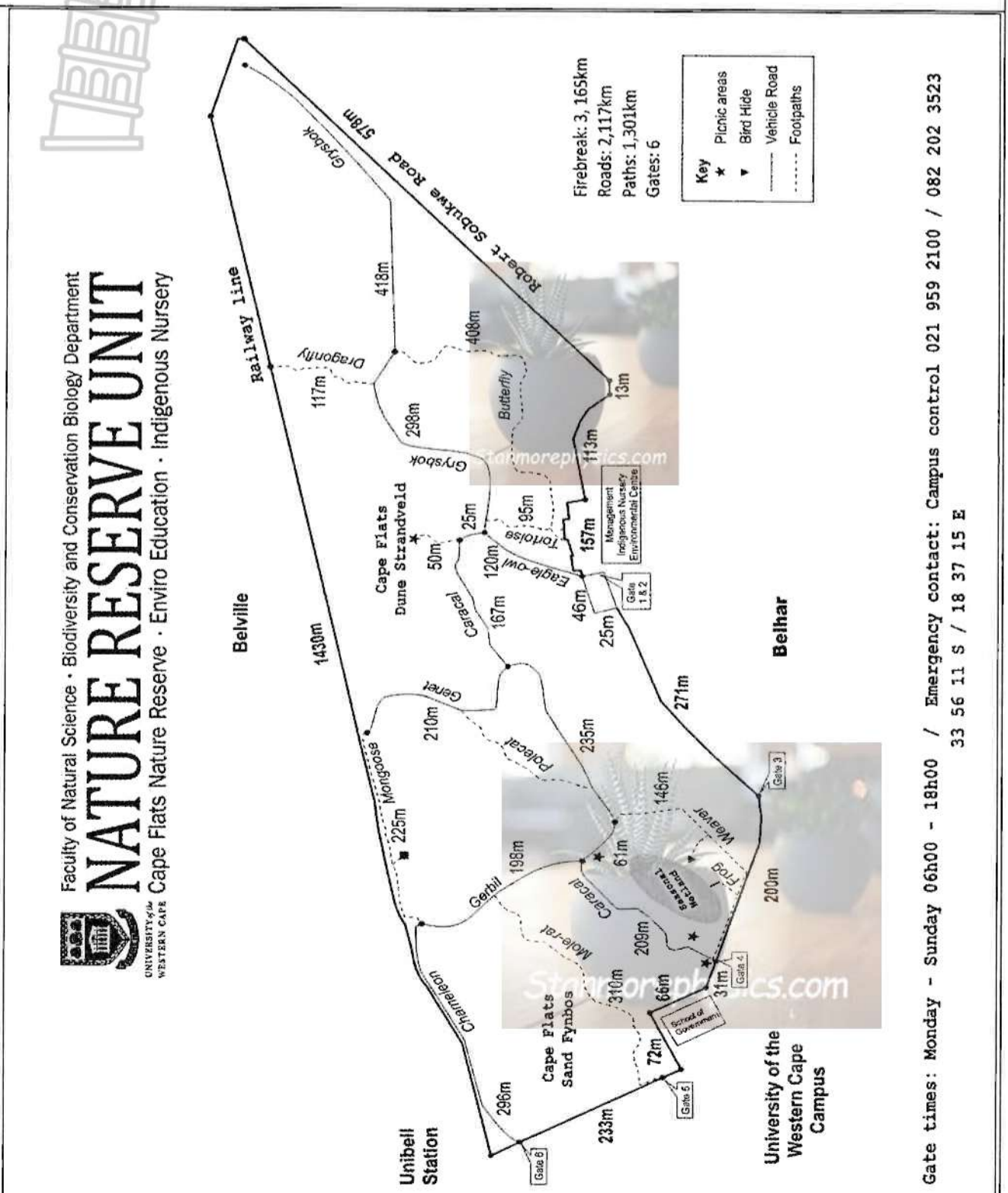
QUESTION 5		
	Solution	**Marks**
5.1.1		(7)
5.1.2		(3)
5.2		(7)

Stanmorephysics.com

Downloaded from Stanmorephysics.com

QUESTION 5.3

ANNEXURE E: MAP OF UNIVERSITY OF WESTERN CAPE NATURE RESERVE UNIT.



[Source: www.uwc.ac.za]

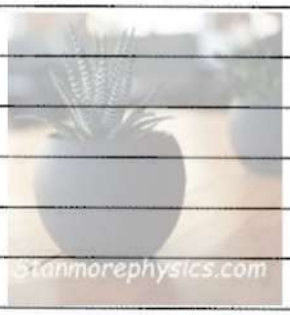
Downloaded from Stanmorephysics.com

	Solution	Marks
5.3.1		(2)
5.3.2		(3)
5.3.3		(2)
5.3.4 (a)		(2)
5.3.4 (b)		(2)
5.4		(5)
		[33]

Stanmorephysics.com

Downloaded from Stanmorephysics.com

	Additional Space	Marks



Downloaded from Stanmorephysics.com

	Additional Space	Marks

Stanmorephysics.com

TOTAL: 150

Copyright reserved

Downloaded from Stanmorephysics.com

education
MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE/ *NASIONALE SENIOR SERTIFIKAAT*

GRADE/*GRAAD* 12

MATHEMATICAL LITERACY P2/
WISKUNDIGE GELETTERDHEID V2
SEPTEMBER 2026
MARKING GUIDELINES/*NASIENRIGLYNE*

Stanmorephysics.com

MARKS/PUNTE: 150

Symbol/*Simbool*	Explanation/*Verduideliking*
MA	Method/ *with accuracy Metode met akkuraatheid*
MCA	Method with accuracy/*Metode met volgehoue akkuraatheid*
CA	Consistent accuracy/*Volgehoue akkuraatheid*
A	Accuracy/*Akkuraatheid*
C	Conversion/*Herleiding*
S	Simplification/*Vereenvoudiging*
RT	Reading from a table/graph/document/diagram / *Lees vanaf tabel/grafiek/dokument/diagram*
SF	Correct substitution in a formula/*Korrekte vervanging in formule*
O	Opinion/E×planation/*Mening/Verduideliking*
P	Penalty, e.g. for no units, incorrect rounding off, etc. / *Straf, bv. Geen eenhede/verkeerde afronding, ens.*
R	Rounding off/*Afronding*
NPR	No penalty for rounding/units/*Geen straf vir afronding/eenhede*
AO	Answer only/*Slegs antwoord*
RCA	Method with consistent accuracy/ *Afronding met volgehoue akkuraatheid*

These marking guidelines consists of 19 pages
Hierdie nasienriglyn bestaan uit 19 bladsye

Copyright reserved

Downloaded from Stanmorephysics.com

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 break down.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- As a general marking principle, if a candidate has incurred one mistake and there is evidence of sound mathematics thereafter then that candidate should lose one mark only.
- A conclusion mark can only be given if ⅓ of the total marks for the sub-question have been awarded.
- No penalty for rounding (NPR) if the first decimal is correct.

Stanmorephysics.com

LET WEL:

- As *'n kandidaat 'n vraag TWEE KEER beantwoord, sien slegs die EERSTE poging na.*
- *As 'n kandidaat 'n antwoord van 'n vraag doodtrek (kanselleer) en nie oordoen nie, sien die doodgetrekte (gekanselleerde) poging na.*
- *Volgehoue akkuraatheid (CA) word in ALLE aspekte van die nasienriglyne toegepas, dit hou op by die tweede berekeningsfout*
- *Let well: Volgehoue akkuraatheid (CA) geld nie in die geval van 'n afbreuk nie.*
- *Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem het en ekstra antwoorde gee,penaliseer vir elke ekstra item.*
- *'n Algemene nasienbeginsel is dat indien 'n kandidaat een fout maak en daarna voortgaan met korrekte wiskunde, dat die kandidaat slegs een punt verloor.*
- *Afronding tel as 'n onafsonderlike punt*
- *'n Gevolgtrekkingspunt kan slegs gegee word indien relevante berekeninge dit voorgaan.*
- *Geen penalisering vir ronding (NPR) as die eerste desimaal korrek is nie.*

Downloaded from Stanmorephysics.com

QUESTION 1 / VRAAG 1 [30 MARKS] Answer only A-D- full marks

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
1.1.1	Actual ground /*Werklike grond* ✓✓A **OR/*OF*** Reality / *Werklikheid* ✓✓A **OR/*OF*** Real life / *Werklike lewe* ✓✓A	2A correct answer / *korrekte antwoord* (2)	MP L1 E
1.1.2	Bar Scale/ Graphical scale / Line scale *Staafskaal/ Grafiesie skaal / Lyn skaal* ✓✓A	2A correct answer / *korrekte antwoord* (2)	MP L1 E
1.2.1	D ✓✓A	2A correct answer/ *korrekte antwoord* (2)	MP L1 E
1.2.2	A ✓✓A	2A correct answer / *korrekte antwoord* (2)	M L1 E
1.2.3	E ✓✓A	2A correct answer / *korrekte antwoord* (2)	P L1 E
1.2.4	J ✓✓A	2A correct answer / *korrekte antwoord* (2)	MP L1 E
1.2.5	G ✓✓A	2A correct answer / / *korrekte antwoord* (2)	M L1 E
1.2.6	K ✓✓A	2A correct answer / *korrekte antwoord* (2)	M L1 E
1.3.1	Floor plan /*Vloerplan* ✓✓A	2A correct answer / *korrekte antwoord* (2)	MP L1 E

Downloaded from Stanmorephysics.com

1.3.2	Southern side / *Suidelike kant* ✓✓A	2A correct side / *korrekte kant* (2)	MP L1 E
1.3.3	Three Dimensional / *Driedimensioneel* ✓✓A **OR/*OF*** 3D ✓✓A	2A correct option / *korrekte opsie* (2)	MP L1 E
1.4.1	Socket ring/*Sokring* ✓✓A	2A correct name / *korrekte naam* (2)	MP L1 E
1.4.2	Part 4/*Deel 4* ✓✓A **OR/*OF*** Instruction manual / *Insturksiehandleiding* ✓✓A	2A correct name/ *korrekte naam* (2)	MP L1 E
1.4.3	B ✓✓A	2A correct name/ *korrekte naam* (2)	MP L1 E
1.4.4	False /*Vals* ✓✓A	2A correct option / *korrekte opsie* (2)	MP L1 E

Downloaded from Stanmorephysics.com

QUESTION/*VRAAG* 2 [27 MARKS/*PUNTE*]

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
2.1.1	Seating plan shows arrangement of seats in the cinema./ *Die sitplekplan wys die rangskikking van sitplekke in die bioskoop* ✓✓A	2A correct definition / *korrekte definisie* (2)	Maps L1 E
2.1.2	NW ✓✓A	2A correct direction/ *korrekte rigting* (2)	Maps L1 E
2.1.3	Total number of seats / *Totale aantal sitplekke* = 160 ✓A $\frac{60}{100} \times 160 = 96$ ✓CA ✓MCA 160 – 96 = 64 ✓CA CORRECT ✓J **OR/*OF*** Total number of seats / *Totale aantal sitplekke* = 160 ✓A 100 % – 60 % = 40 % ✓A ✓MCA $\frac{40}{100} \times 160 = 64$ ✓CA CORRECT/*KORREK* ✓O	1A total number of seats/*totale aantal sitplekke* 1CA calculating 60% of seats/ *bereken 60% van die sitplekke* 1MCA subtracting correct values/ *trek korrek waardes af* 1CA number of vacant seats/ *aantal oop sitplekke* 1J conclusion/ *gevolgtrekking* **OR/*OF*** 1A total number of seats/ *totale aantal sitplekke* 1A 40% 1MCA calculating unoccupied seats/ *bereken oop sitplekke* 1CA number of vacant seats/ *aantal oop sitplekke* 1O conclusion/ *gevolgtrekking* (5)	Maps L4 M
2.1.4	G 8 ✓✓ RT & G7 ✓ RT	2 RT 1st correct seat/ *korrekte sitplek* 1RT 2nd second seat/ *korrekte sitplek* (3)	Maps L2 M
2.1.5	Ramp/*Oprit* ✓✓A **OR/*OF*** Sign of wheelchair / *Simbool van Rolstoel* ✓✓A **OR/*OF*** Picture of wheelchair / *Prentjie van rolstoel* ✓✓A	2A correct feature/*korrekte kenmerk* **OR/*OF*** 2A correct feature/*korrekte kenmerk* **OR/*OF*** 2A correct feature/*korrekte kenmerk* (2)	Maps L1 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
2.1.6	As you enter the cinema from the back , turn ✓A ✓A right follow the Aisle turn left, turn left , turn ✓A ✓A right passing row F, on row E turn right to seat number 9 *Wanneer jy die bioskoop van agter binnegaan, draai regs, volg die gangpad, draai links, draai links, draai regs verby ry F, op ry E draai regs na sitplek nommer 9* **OR/*OF*** As you enter the cinema from the back , turn ✓A ✓A East follow the Aisle turn north, turn west , ✓A turn north passing row F, on row E turn east to seat number 9 ✓A ✓A Wanneer jy die bioskoop van agter binnegaan, draai oos, volg die gangpad, draai noord, draai west, draai noord verby ry F, op ry E draai oos na sitplek nommer 9 **OR/*OF*** As you enter the cinema from the back , turn ✓A ✓A right/east follow the Aisle turn left/north, ✓A ✓A continue straight/north until you reach row E on your left/west, continue straight/west to seat number 9 , *Wanneer jy die bioskoop van agter binnegaan, draai regs/oos, volg die gangpad, draai links,/noord hou aan reguitt/noord loop, draai links/wes by ry E, loop reguit /wes tot sitplek nommer 9*	1A right / *regs* 1A left / *links* 1A left / *links* 1A right passing row F / *regs verby ry F* 1A right on row E / *regs na ry E* **OR/*OF*** 1A east/ *oos* 1A north/ *noord* 1A west / *wes* 1A north passing row F/ *Noord verby ry F* 1A east on row E/ oos *op ry E* **OR/*OF*** 1A right/east / *regs/oos* 1A left/north / *links/noord* 1A Straight/north/ *reguit/noord* 1A left/west on row E / *links/wes by ry E* 1A continue straight/west to seat 9 / *beweeg reguit/wes na sitplek 9* (5)	Maps L2 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
2.2.1	✓ MA $2 \times 3 \times 2 = 12$ ✓ A	1MA multiply correct values/ *vermenigvuldig korrekte waardes* 1A Simplification/ *Vereenvoudiging* **AO** (2)	P L2 M
2.2.2	(i) C/*K* ✓ A (ii) J ✓ A (iii) RWJ/*GWJ* ✓ A	3A correct answer/*korrekte antwoord* (3)	P L2 E
2.2.3	✓ A ✓ CA $\frac{6}{12} \times 100 = 50\ \%$ ✓ CA **OR/*OF*** $\frac{1}{2}$ ✓ A $\times 100 = 50\ \%$ ✓ CA ✓ A	**CA from 2.2.1** 1A numerator / *Teller* 1CA denominator / *noemer* 1CA percentage/ *persentasie* **OR/*OF*** 1A numerator / *Teller* 1A denominator / *Noemer* 1A percentage / *persentasie* **AO** (3)	P L2 M

Stanmorephysics.com

Downloaded from Stanmorephysics.com

QUESTION/VRAAG 3 (32 MARKS/PUNTE)			
Q/V	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T/L**
3.1.1	✓MA ✓MA $4.6\text{ m} - 3.9\text{ m} = \frac{0,7\text{ m}}{2} = 0,35\ m$	1MA subtracting correct values/ *trek korrekte waardes af* 1MA dividing by 2 / *deel met 2* (2)	M L2 E
3.1.2	✓A $\frac{3,9\text{ m}}{2} = 1,95\ m$ ✓SF ✓CA $3,142 \times 1,95^2 = 11,947455\text{ m}^2$ $\approx 12\text{ m}^2$ ✓R	1A calculating radius / *bereken radius* 1SF substitute to correct formula Values/*vervang korrekte waardes in formule* 1CA Simplification/ *vereenvoudiging* 1R rounding/*afronding* (4)	M L2 E
3.1.3	Safety / *Veiligheid* ✓✓O	2A correct reason / *regte rede* (2)	M L4 M
3.1.4	Area of outer circle/ *Oppervlakte buitrenste sirkel* $\frac{4,6\text{ m}}{2} = 2,3\ m$ ✓A ✓SF $3,142 \times 2,3^2 = 16,62118\text{ m}^2$ ✓CA Area inner circle (from 3.1.2) /*Oppervlakte van binne sirkel (vanaf 3.1.2)* $=3,142 \times 1,95^2 = 11,95\text{ m}^2$ Area of pads / *Oppervlakte van kussings* ✓MCA ✓CA $16,62118\text{ m}^2 - 11,947455\text{ m}^2 = 4,673725\text{ m}^2$ INCORRECT/ NIE KORREK NIE ✓O	**Ca from 3.1.2 /CA *van 3.1.2*** 1A radius 1SF substitute to correct formula/*invervang in korrekte formule* 1CA correct area/*korrekte oppervlakte* 1MCA subtracting both areas (rom / *trek beide oppervlaktes af* 1CA simplification/ *vereenvoudiging* 1O Conclusion/*gevolgtrekking* **NPR** (6)	

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
3.2.1	✓RT 755 feet/*voet* × 30,48 = 23 012,4 cm ✓C 23 012,4 cm × 23 012,4 cm ✓SF = 529 570 553,8 cm^2 ✓CA **OR/*OF*** ✓RT ✓SF 755 × 755 = 570 025 ft^2 ✓CA 570 025 × 30,48^2 = 529 570 553,8 cm^2 ✓C	1RT length of base/*lengte van basis* 1C feet to cm/*voet na cm* 1SF substitute to correct formula/ *invervang na korrekte formule* 1CA simplification/ *vereenvoudiging* **OR/*OF*** 1RT length of base/*lengte van basis* 1SF substitute to correct formula/ *invervang na korrekte formule* to cm/*voet na cm* 1CA simplification/ *vereenvoudiging* 1C feet (4)	M L2 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
3.2.2	$\frac{1}{2}$ × 755 feet/*voet*× 450 feet/*voet* ✓SF = 169 875 feet^2/*voet*^{2} ✓A ✓MA 169 875 feet^2 / *voet*^{2} × 4 = 679 500 feet^2 / *voet*^{2} ✓CA ≈ 680 000 feet^2/ *voet*^{2} ✓R	1SF correct formula/*korrekte formule* 1A area/*oppervlakte* 1MA multiply by 4/ *vermenigvuldig met 4* 1CA simplification / *vereenvoudiging* 1R rounding /*afronding* (5)	M L2 M
3.3.1	✓C ✓ CA 2,5 tons/*ton* × 1 000 = 2 500 kg ✓ MCA 2 500 kg × 2 300 000 = 5 750 000 000 kg ✓ CA **OR/*OF*** ✓ MA 2,5 tons/*ton* × 2 300 000 = 5 750 000 tonnes/*ton* ✓ A ✓ C 5 750 000 tonnes/*ton* × 1 000 5 750 000 000 kg ✓ CA	1 C tons to kg/*ton na kg* 1CA weight in kg/*gewig in kg* 1MCA multiply correct values/ *vermenigvuldig korrekte waardes* 1CA simplification/ *vereenvoudiging* **OR/*OF*** 1MA multiply correct values/ *vermenigvuldig korrekte waardes* 1A weight in tonnes/ *gewig in ton* 1 C tons to kg/ *ton na kg* 1CA simplification/ *vereenvoudiging* (4)	M L2 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
3.3.2	✓ C 2,6 million m^3 /*miljoen* m^3× 1000 litres = 2 600 million liters/ *miljoen liters* ✓ A ✓ C $\frac{\text{2 600 million liters/ } miljoen\ liters}{28{,}3168466}$ 91,81813345 million $feet^3$/*miljoen voet*^{3} 91, 81813345 × 1 000 000 ✓ MA 91 818 133,45 $feet^3$/*voet*^{3} ✓ CA **OR/*OF*** ✓ C $\frac{\text{2 ,6 million cubic metres /miljoen vierkante meters}}{28{,}3168466}$ ✓ A 0,091818133 *million* $feet^3$/*miljoen voet*^{3} ✓ C 0,091818133 *million* ft^3/ *miljoen* vt^3 × 1 000 ✓MA 91,81813345 million litres/*miljoen liters* × 1 000 000 91 818 133,45 $feet^3$/*voet*^{3} ✓ CA	1C from m^3 to litres/ *van* m^3 *na liters* 1A volume to litres/*volume na liters* 1 C volume to $feet^3$ /volume na $voet^3$ 1MA multiply by 1000 000/ *vermenigvuldig met 1 000 000* 1CA simplification/ *vereenvoudiging* **OR/*OF*** 1C volume to $feet^3$/*volume na voet*^{3} 1A volume to $feet^3$/*volume na voet*^{3} 1C from $feet^3$ to litres/*van voet*^{3} *na liters* 1MA multiply by 1000 000/ *vermenigvuldiging met 1000* 1CA simplification/ *vereenvoudiging* **NPR** (5)	M L2 M

Stanmorephysics.com

Downloaded from Stanmorephysics.com

QUESTION/VRAAG 4 [28 MARKS/PUNTE]			
Q/V	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T/L**
4.1.1	R 40 ✓✓A	2A correct value/*korrekte waarde* (2)	Maps L1 E
4.1.2	$1h\ 7\ \text{min} = 1 + (\frac{7}{60})$ ✓RT = 1,116666666 hours/*uur* ✓A ✓SF $\frac{4{,}8\ \text{km}}{1{,}11666666} = 4{,}29\ km/h$ ✓CA INVALID/*NIE GELDIG NIE* ✓O ✓RT **OR/*OF*** 1h 7 min = (1 x 60) + 7 67 minutes/*minute* ✓C 67 ÷ 60 = 1,11666666 hours /*ure* ✓SF $\frac{4{,}8\ \text{km}}{1{,}11666666} = 4{,}29\ km/h$ ✓CA INVALID/*NIE GELDIG NIE* ✓O **OR/*OF*** Speed/*spoed* = distance/*afstand* ÷ time/*tyd* 5 km/h = $\frac{\text{distance /}afstand}{\text{1h 7 min}}$ ✓SF ✓RT ✓C 5 km/h × 1,11666666 = distance/*afstand* distance/*afstand* = 5,5833 km ✓A INVALID/*NIE GELDIG NIE* ✓O **OR/*OF*** Speed/*spoed* = distance/*afstand* ÷ time/*tyd* 5 km/h = $\frac{4{,}8\ \text{km}}{time\ /\ Tyd}$ ✓SF ✓RT 4,8 km ÷ 5km/h = time/*tyd* ✓CA ✓C time/*tyd* = 0,96 hours/*ure* ≈ 57 min INVALID/ *NIE GELDIG NIE* ✓O	1RT walking time/ *stap tyd* 1A time in hours/*tyd in ure* 1SF substitution/ *vereenvoudiging* 1CA simplification/ *vereenvoudiging* 1O conclusion/ *gevolgtrekking* **OR/*OF*** 1RT walking time/*stap tyd* 1C time in hours/*tyd in ure* 1SF substitution/ *invervanging* 1CA simplification /*vereenvoudiging* 1O conclusion/*gevolgtrekking* **OR/*OF*** 1RT walking time/*stap tyd* 1C time in hours/*tyd in ure* 1SF substitution/ *invervanging* 1CA simplification /*vereenvoudiging* 1O conclusion/*gevolgtrekking* **OR/*OF*** 1RT walking time/*stap tyd* 1SF substitution/ *invervanging* 1CA simplification /*vereenvoudiging* 1C time in hours/*tyd in ure* 1O conclusion/*gevolgtrekking* (5)	Maps L4 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
4.1.3	$\frac{165\text{ cm}}{100} = 1{,}65\ m$ ✓A $\frac{87\text{ kg}}{1{,}65 \times 1{,}65} = 31{,}95592287\text{ kg/m}^2$ ✓SF ✓CA Obese / *Vetsig* ✓A	1A height in meters/*hoogte in m* 1SF substitution squaring height/ *invervanging vierkant hoogte* 1CA simplification/ *vereenvoudiging* 1A correct weight status / *korrekte gewig status* (4)	Maps L3 M
4.2.1	Length /*Lengte* 200 – 25 – 25 = 150 cm ✓MA ✓CA Width / *Breedte* ✓MA 200 cm – 15cm – 35 cm – 12 cm – [(15mm ÷10) × 3] = 133,5 cm ✓C ✓CA Area ✓SF 150 cm × 133,5 cm = 20 025 cm^2 ✓CA **OR/*OF*** 200 – (25 × 2) ✓MA = 150 cm ✓CA Width / *breedte* ✓MA 200 cm – 15cm – 35 cm – 12 cm – 1,5 cm – 1,5 cm – 1,5 cm ✓MA = 133,5 cm ✓CA Area /*Oppervalkte* 150 cm × 133,5 cm ✓SF = 20 025 cm^2 ✓CA	1MA subtracting correct values/ *trek die korrekte waardes af* 1CA correct length /*korrekte lengte* 1MA subtracting correct values/ *trek korrekte waardes at the* 1C convert from mm to cm and multiply by 3/ *Skakel om van mm na cm en maal met 3* 1CA correct width/*korrekte breedte* 1SF substitution/ *invervanging* 1CA simplification/ *vereenvoudiging* **OR/*OF*** 1MA subtracting correct values/ *aftrek van korrekte waardes* 1CA correct length/*korrekte lengte* 1MA subtracting correct values/ *aftrek van korrekte waardes* 1MA subtract all 1,5 cm values / *aftrek van al die 1,5cm waardes* 1CA correct width/ *korrekte breedte* 1SF substitution/ *invervanging* 1CA simplification/ *vereenvoudiging* (7)	M L3 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
4.2.2	✓C 65,4 inches × 2,54 = 166,116 cm ✓A 36,8 inches × 2,54 = 93,472 cm ✓A ✓MA Area/*Oppervlakte* = 166,16 cm × 93,472 cm = 15 527,19 cm^2 **OR/*OF*** Area/Oppervlakte ✓MA ✓A =65,4 × 38,6 = 2 406,72 inches^2/*duim*^{2} 2 406,72 × 2,54 ✓C ^{2} = 15 527,19 cm^2 ✓A	1C length to cm/*lengte na cm* 1A length in cm/*lengte na cm* 1A height in cm/*lengte na cm* 1MA multiply correct values/ *vermenigvuldig correcte waardes* **OR/*OF*** 1MA multiply correct values/ *vermenigvuldig correcte waardes* 1A Area in inch^2/*Oppv in duim*^{2} 1C area to cm^2/oppv *na cm*^{2} 1A Area in cm^2/*Oppv in cm*^{2} (4)	M L2 M
4.2.3	Bottom brown board/*onderste bruin plank* ✓SF ✓A 200 cm × 30 cm × 1,5 cm = 9 000 cm^3 Top brown board /*boonste bruin plank* ✓A 200 cm × 15 cm × 1,5 cm = 4 500 cm^3 9 000 cm^3 + 4 500 cm^3 = 13 500 cm^3 ✓CA ✓C 13 500 cm^3 ÷ 100^3 = 0,0135 m^3 ✓CA **OR/*OF*** ✓C 2 m × 0,30 m × 0,015 cm = 0,009 m^3 ✓A Top brown board /*boonste bruin plank* ✓SF 2 m × 0,15 m × 0,015 cm = 0,0045 m^3 ✓A ✓MCA 0,009 m^3 + 0,0045 cm^3 = 0,0135 m^3 ✓CA	1SF 1st substitution/*invervanging* 1A 1st volume/1ste volume 1A 2nd volume/2de *volume* 1MA total volume/*totale volume* 1C convert to m^3/*omskakeling na m*^{3} 1CA simplification/ *vereenvoudiging* **OR/*OF*** 1C convert to m/*omskakel na m* 1SF substitution/*invervanging* 1A bottom volume/*onderste volume* 1A top volume/*top volume* MCA adding correct values/*tel korrekte waardes op* 1CA simplification/ *vereenvoudiging* (6)	M L3 M

Downloaded from Stanmorephysics.com

QUESTION/*VRAAG* 5 [33 MARKS/*PUNTE*]			
Q/V	**Solution/*Oplossing***	**Explanation/*Verduideliking***	**T/L**
5.1.1	$48 \times 1000 = 48\,000$ kg ✓C 48 000 kg – 10 000 kg – (13 600 × 2) ✓MA = 10 800 kg ✓CA 10 800 × 3 000 ✓MCA = 32 400 000 kg ✓CA 32 400 000 kg ÷ 1 000 32 400 tonnes/*ton* ✓CA CORRECT/*KORREK* ✓O **OR/*OF*** 10 000 kg ÷ 1 000 = 10 t ✓C 13 600 ÷ 1 000 = 13,6 t ✓MA 10 t + 13,6 ton + 13,6 t = 37,2 t ✓MCA ✓CA 48 t – 37,2 t = 10,8 t ✓MCA 10,8 t × 3 000 = 32 400 tonnes/*ton* ✓CA CORRECT /*KORREK* ✓O	1C weight in kg/*gewig in kg* 1MA subtracting correct values and multiply 13 600 by 2/*trek korrekte waares en vermenigvuldit 13600 by 2* 1CA weight of coal in kg/ *gewig van die kool in kg* 1MCA multiply by 3 000/ *vermenigvuldig met 3000* 1CA total weight/*totale gewig* 1CA simplification/ *vereenvoudiging* 1O conclusion/ *gevolgtrekking* **OR/*OF*** 1C kg to tonnes/*kg na ton* 1MA adding correct values /*tel korrekte waardes op* 1MCA subtract correct values from 48 t/ *trek die korrekte waardes af van 48t* 1CA weight of coal in tonnes/ *gewig van kool in ton* 1MCA multiply by 3 000/ *vermenigvuldig met 3000* 1CA simplification / *vereenvoudiging* 1O conclusion/ *gevolgtrekking* (7)	M L3 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
5.1.2	✓MA $\frac{205\,000}{32\,400} = 6{,}327$ ≈ 7 days/*dae* ✓CA CORRECT /*KORREK* ✓O **OR/*OF*** $\frac{205\,000}{7}$ ✓MA ✓CA $= 29\,285{,}711428$ needed per day *(nodig per dag)* CORRECT /*KORREK* ✓O **OR/*OF*** ✓MA ✓CA *7× 32 400 = 226 800* ✓O CORRECT /*KORREK*	**CA from 5.1.1/*CA van 5.1.1*** 1MA divide correct values / *deel korrekte waardes* 1CA simplification/ *vereenvoudig* 1O conclusion/ *gevolgtrekking* **OR/*OF*** 1MA divide correct values / *deel korrekte waardes* 1CA simplification/ *vereenvoudig* 1O conclusion/ *gevolgtrekking* **OR/*OF*** 1MA multiply with correct values / *maal met korrekte waardes* 1CA simplification/ *vereenvoudig* 1O conclusion/ *gevolgtrekking* (3)	M L4 M
5.2	1 200 tonnes/*ton* ×1 000 ✓MA = 1 200 000 kg × 1 000 ✓C 1 200 000 000 grams volume = mass/*massa* ÷ density/*digtheid* ✓S capacity/*kapasiteit* ✓SF = 1 200 000 000 g ÷ 1,1 g/cm^3 1 090 909 091 cm^3 ✓CA $\frac{1\,090\,909\,091}{1\,000\,000}$ ✓C $= 1\,090\,,909091\ m^3$ ✓CA	1A mass in kg/*massa in kg* 1C kg to grams./*kg na gram* 1S change of subject/ *verander die onderwerp* 1SF substitution/ *invervanging* 1CA capacity in cm^3/*kapasiteit in cm^3* 1C convert to m^3 /*omskakeling na m^3* 1CA simplification/ *vereenvoudiging* **NPR** (7)	M L3 M

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
5.3.1	4 ✓✓RT	2RT correct number/ *korrekte getal* (2)	Maps L1 E
5.3.2	6:00 to 18:00 = 12 hours/*ure* ✓A ✓MA 12 hours × 7 days/*dae* = 84 hours/*ure* × 60 = 5 040 min ✓C **OR/*OF*** 06:00 to 18:00 =12 hours/*ure* ✓A 12 × 60 ✓C 720 minutes × 7 days ✓MA = 5 040 minutes	1A hours per day/aantal ure *per dag* 1MA multiply by 7/ *vermenigvuldig met 7* 1C convert to minutes / *omskakeling na minute* **OR/*OF*** 1A hours per day/ *aantal ure per dag* 1C convert to minutes/ *omskakeling na minute* 1MA multiply by 7 days / *vermenigvuldiging met 7 dae* (3)	Maps L2 E
5.3.3	Ecology/ Ekologie ✓✓A **OR/*OF*** Envirnomental science/ *Omgewingswetenskap* ✓✓A **OR/*OF*** Plant biology/ Plantbiologie ✓✓A **OR/*OF*** Nature conservation/ *Natuurbewaring* ✓✓A **OR/*OF*** Forestry/ *Bosbou* ✓✓A **OR/*OF*** Biodiversity/ Biodiversiteit ✓✓A **OR/*OF*** Any relevent course that has to do with nature, plants & animals ./ Enige relevante kursus wat met natuur, plante en diere te doen het, .	2A correct coarse/ *korrekte kursus* (2)	Maps L4 D

Stanmorephysics.com

Downloaded from Stanmorephysics.com

Q/V	Solution/*Oplossing*	Explanation/*Verduideliking*	T/L
5.3.4 (a)	Eagle-owl ✓✓RT	2RT correct name / *korrekte naam* (2)	Maps L2 E
5.3.4 (b)	Part of the road is a foot path./ *Gedeelte van die pad is 'n voetpaaie* ✓✓A	2A correct reason / *korrekte rede* (2)	Maps L4 M
5.4	✓MA 112 507 × 127,6% ✓A = 143 558,932 people/*mense* ✓MA 143 558,932 people/*mense* ÷ 52,39 km^2 ✓CA = 2 740 people / km^2 /*mense /km^2* INCORRECT/*NIE KORREK NIE* ✓O **OR/*OF*** 112 507 × 27,6% ✓MA = 31 051,932 112 507 + 31 051,932 = 143 558,932 people/*mense* ✓A ✓MA 143 558,932 people/*mense* ÷ 52,39 km^2 ✓CA = 2 740 people / km^2 /*mense /km^2* INCORRECT/*NIE KORREK NIE* ✓O **OR/*OF*** 112 507 × 1,276 = 143 558,932 people/*mense* ≈ 143 559 ✓A ✓MA 143 559 people/*mense* ÷ 52,39 km^2 = 2 740,1985 people / km^2 /*mense /km^2* ✓CA INCORRECT/*NIE KORREK NIE* ✓O	1MA calculate 127,6% /*bereken* 127,6% 1A population in 2025/ *bevolking in 2025* 1MA divide correct values/ *deel korrekte waardes* 1CA simplification/ *vereenvoudiging* 1O conclusion/ *gevolgtrekking* **OR/*OF*** 1MA calculate 27,6%/ *bereken 27,6%* 1A population in 2025/ *bevolking in 2025* 1MA divide correct values/ *deel korrekte waardes* 1CA simplification/ *vereenvoudiging* 1O conclusion/ *gevolgtrekking* **OR/*OF*** 1MA calculate 1,276/*bereken* 1,276 1A population in 2025/ *bevolking in 2025* 1MA divide correct values/ *deel korrekte waardes* 1CA simplification/ *vereenvoudiging* 1O conclusion/ *gevolgtrekking* **Accept/*Aanvaar:* 2 741** (5)	M L4 M

Downloaded from Stanmorephysics.com

Marking guideline Notes		
2.1.4	If: 7 & 8 only mentioned	0 marks
4.1.2	If : $\frac{4{,}8\text{ km}}{1\ h\ 7\ min} = 4{,}29\ km/h$ INVALID/*NIE GELDIG NIE*	5 Marks (Full marks)
5.1.2	$\frac{205\,000}{32\,400} = 6{,}327$ ≈ 6 days/*dae* INVALID /NIE *KORREK NIE*	Max 2 marks
5.1.2	$\frac{205\,000}{30\,000} = 6{,}833$ ≈ 7 days/*dae* CORRECT /*KORREK*	Max 2 marks

Stanmorephysics.com