

2 MATHEMATICAL LITERACY P2 Downloaded from Stanmorephysics.com INSTRUCTIONS AND INFORMATION

Read the following instructions carefully before answering the questions.

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



1.1 Zanele and Reneiloe are driving to Pretoria one morning. Zanele departs from Randburg and picks up Reneiloe who stays in Midrand. The car is driven at an average speed of 100 km/h from Randburg to Midrand and then to Pretoria. The clock below shows the time at which Zanele left Randburg.



[Source: www.googleimages.com]

- 1.1.1 Identify the type of clock displayed above. (2)
- 1.1.2 Write down the time Zanele left home in words. (2)
- 1.1.3 Zanele arrived at Reneiloe's place at 10:27. Determine how long it took her to get to Midrand.



1.2.1 Define the term *perimeter*.

(2)

(2)

(2)

1.2.2 Hence, calculate the perimeter of the room in centimetres.



- 1.3.2 Hence, calculate the area of the tile in m^2 . You may use the following formula: Area of a square = side × side (2)
- Study the list of items below that are needed to assemble an office chair and answer the questions that follow.



- 1.4.1 Identify the number of casters (wheels) needed to assemble the office chair.
- Name the tool that will be used to tighten the bolts and washers. 1.4.2 (2)
- List the different types of bolts and washers needed for the backrest. 1.4.3 (2)

1.4

[20]

(2)

Downloaded from Stanmorephysics.com OUESTION 2

2.1 Knysna is a town in the Western Cape province of South Africa. The map of Knysna and surrounding areas in the Western Cape is shown in ANNEXURE A.

Use ANNEXURE A to answer the questions below.

- 2.1.1 Identify the national road on the map.
- 2.1.2 In which general direction will you go if you travel from Belvidere Village to Leisure Island?
- 2.1.3 The actual distance between Paradise and Hornlee is 7 km. Use the scale to calculate the map distance (to the nearest cm) between the two towns. (4)
- 2.2 Busisiwe lives in Knysna Heights and plans a trip to Pezula Estate where she will spend the weekend with her friends. The distance between Knysna Heights and Pezula Estate is 11,2 km travelled via the N2.

Busisiwe travels at an average speed of 100 km/h and she drives a Polo Vivo 1.4 with a fuel consumption of 5,7 litres per 100 km.

Use the map of Knysna and the above information to answer the following questions.

2.2.1 Calculate the approximate time, in minutes, that Busisiwe will take to travel from Knysna Heights to Pezula Estate.

You may use the following formula: Speed = $\frac{\text{Distance}}{\text{Time}}$

- 2.2.2 Busisiwe and her friends travelled an approximate distance, in and around Pezula Estate, of 156 km with her car. Determine the total distance Busisiwe travelled during the weekend including her trip to Pezula Estate and back. (3)
- 2.2.3 Busisiwe claims that she will spend less than R250,00 on petrol for her return trip including the weekend driving to and from Pezula Estate.

Verify, with the necessary calculations, whether her statement is valid or not.

NOTE: Cost of petrol = R24,45 per litre



(2)

(2)

(4)

MATHEMATICAL LITERACY P2 Downloaded from Stanmorephysics.com **QUESTION 3**

3.1 Hein bought a fish tank at Premium Aquatics. The fish tank, with dimensions, is shown in the picture below.



[Source: https://aquapap.com/fish-tanks]

Use the above information to answer the questions that follow.

- Define the term *volume* in the context above. 3.1.1
- 3.1.2 Calculate the height of the fish tank if the volume is 38,8 ft³.

You may use the following formula: Volume of fish tank = $\pi \times \text{radius}^2 \times \text{height}$, where $\pi = 3,142$ (3)

The required temperature for the fish tank is 72 °F. Hein claims that he 3.1.3 needs to set the temperature to 22,2 °C to be equivalent to the required temperature. Verify, with the necessary calculations, whether Hein's claim is valid or not.

You may use the following formula: $^{\circ}C = (^{\circ}F - 32^{\circ}) \times \frac{5}{9}$

- The fish tank is 75% full of water. After adding stones to the bottom of the 3.1.4 fish tank, the fish tank is 87% full of water. Calculate the volume of the stones in cubic feet (ft³). Round your final answer to ONE decimal place. (5)
- Hein has 7 fish in his fish tank: 3 yellow, 1 blue, 2 red, and 1 silver. 3.1.5 Determine the probability (as a percentage) of selecting a silver fish from the fish tank.

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(3)

(2)

(3)

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3.2 Hein wants to build a cabinet to display his fish tank and to prevent it from falling and breaking. His bricklayer informed him that he would need about 2 500 bricks for the cabinet he has in mind. Below is an image of the brick they will use.



3.2.1 Calculate the total surface area (in mm²) of one of the bricks needed for the wall display cabinet.

You may use the following formula: **Total Surface Area = [2 (l × w) + 2 (l × h) + 2 (w × h)]** (4)

- 3.2.2 Determine the number of complete pallets transported by truck if one pallet contains 500 bricks.
- 3.2.3 The weight of the pallets transported is 9 187,5 kg. Convert the weight of one pallet to ton.

NOTE: 1 000 kg = 1 ton

3.2.4 Hein claims that the volume of all the bricks is 4,7 m³. Verify, with the necessary calculations, whether Hein's claim is valid or not.

You may use the following formula: Volume of one brick = Length × Width × Height

(5)

(2)

(3)

3.2.5 One of the bricks that Hein is going to use costs R2,60 and the cost of delivery is R650.

Calculate the cost Hein will have to pay for the bricks that will be needed, including delivery. Round your final answer to the nearest hundred rand. (4)

[34]

Downloaded from Stanmorephysics.com **QUESTION 4**

- Scranton is a hamlet in the town of Pennsylvania in New York, United States. Study the 4.1 road map of Scranton in ANNEXURE B of the addendum and answer the questions below.
 - List TWO types of scales used on maps. 4.1.1
 - 4.1.2 Using the given scale, calculate the actual distance in miles between Clarks Summit and Archbald, if the distance on the map between these two places is 10,5 cm.
 - A tourist must attend a conference in Blakely at 15:00. The travelling distance 4.1.3 from his house to Blakely is 121,4 miles. He claims that if he leaves his house at 13:30 and stops at the petrol station for 25 minutes, he will be on time for his conference. The tourist travels at an average speed of 85 miles/hour.

Verify, with the necessary calculations, whether his claim is valid or not.

You may use the following formula:

Distance Time = Sneed

Determine the probability of randomly selecting a road on the map that is a state 4.1.4 road.

4.2 Lwandile bought an Ugandan flag mounted on a rectangular wooden frame as shown in the diagrams below.

(Diagram NOT drawn to scale).

Show that the area of the white cloth needed to cover the circle is 70,89 cm². 4.2.1

You may use the following formula:	
Area of a circle = $\pi \times \text{radius}^2$, where $\pi = 3,142$	(3)

(2)

(5)

(2)

Please turn over

(6)

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4.2.2 Determine the width of the rectangular wooden frame in centimetres, if the area of the rectangular wooden frame, without the circle, is 2 682 cm².

	You may use the following formula: Area of a rectangle = Length × Width NOTE: 1 inch = 2,54 cm	(5)
4.2.3	Lwandile claims that the width of ONE of the rectangular bars is 8 cm.	
	Verify, with the necessary calculations, whether his claim is valid or not.	(3)



TOTAL: 100

9

[26]









This addendum consists of 3 pages.

ANNEXURE A

QUESTION 2.1

MAP OF KNYSNA AND SURROUNDING AREAS





ANNEXURE B

QUESTION 4.2

ROAD MAP OF SCRANTON IN PENNSYLVANIA, NEW YORK



[Adapted from ItsEasy Passport & Visa | Serving Scranton, Pennsylvania]



NATIONAL SENIOR CERTIFICATE

GRADE 11

NOVEMBER 2024

MATHEMATICAL LITERACY P2 MARKING GUIDELINES

MARKS: 100

Symbol	Explanation
M	Method
MA	Method with accuracy
СА	Consistent accuracy
Α	Accuracy
С	Conversion
S	Simplification
RT	Reading from a table/graph/diagram
SF	Correct substitution in a formula
0	Opinion/Explanation/Reasoning
Р	Penalty, e.g. for no units, incorrect rounding off etc.
R	Rounding Off/Reason
NPR	No penalty for correct rounding minimum two decimal places
AO	Answer only
MCA	Method with consistent accuracy
RCA	Rounding with consistent accuracy

This marking guidelines consist of 11 pages.

MATHEMATICAL LITERACY P2 Downloaded from Stanmorephysics.com **MARKING GUIDELINES**

NOTE:

2

- If a candidate answers a question TWICE, only mark the FIRST attempt. ٠
- 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 ٠ second calculation error.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, ٠ then penalize for every extra incorrect item presented.



MATHEMATICAL LITERACY P2

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KEY TO TOPIC SYMBOL:

F = Finance; **M** = Measurement; **MP** = Maps, plans and other representations; **P** = Probability

QUESTION 1 [20 MARKS] ANSWER ONLY FULL MARKS Solution Explanation Ques. Level 1.1.1 Analogue clock $\checkmark \checkmark \land$ 2A correct type clock Μ (2)L1 1.1.2 Ten minutes past ten o'clock in the morning. $\checkmark \checkmark \land$ 2A correct time М L1 OR Ten past ten in the morning. $\checkmark \checkmark A$ ШП OR Ten past ten before noon. $\checkmark \checkmark \land$ (2)1.1.3 Time taken = 10:271M subtracting time Μ -<u>10:10</u> √M 1A correct time L1 = 00:17 \therefore 17 minutes \checkmark A (2) 1.2.1 Perimeter is the distance around an object or shape. $\checkmark \checkmark A$ 2A definition Μ (2)L1 1.2.2 Perimeter = 230 cm + 200 cm + 95 cm + 88 cm + 135 cm +1MA adding all the Μ 112 cm √MA correct values L1 $= 860 \text{ cm } \checkmark \text{A}$ 1A perimeter Accept if calculated as follows: Perimeter = $(230 \times 2) + (200 \times 2) \checkmark MA$ 1MA multiplying length and width by 2 $= 860 \text{ cm} \checkmark \text{A}$ 1A perimeter (2)Side or length = $\frac{43}{100}$ \checkmark C 1.3.1 1C conversion М 1A answer L1 $= 0.43 \text{ m} \checkmark \text{A}$ (2)OOT 1.3.2 CA from 1.3.1 Area of a square = side \times side Μ $= 0.43 \times 0.43 \checkmark SF$ **1SF** substitution L1 = 0.18491MCA area in m² $\approx 0.18 \text{ m}^2 \checkmark \text{MCA}$ NPR (Accept 0,185 m²) (2)2A number of casters 1.4.1 5 casters (wheels) $\checkmark \checkmark A$ MP (2)L1 1.4.2 Tool = Allen key $\checkmark \checkmark \land$ 2A correct tool MP

(2)

L1

4	MATHEMATICAL LITERACY P2	(EC/NOVEMBER 202	<u>(4)</u>
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1.4.3	$ \begin{array}{c} M8 \times 15 \text{ mm } \checkmark \text{A} \\ M5 \times 18 \text{ mm } \checkmark \text{A} \end{array} $	1A M8 × 15 mm 1A M5 × 18 mm (Accept any order) (2)	MP L1
		[20]	





(EC/NOVEMBER 2024)

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QUESTION 2 [20 MARKS]

Ques.	Solution		Explanation		Level
2.1.1	N2 $\checkmark \checkmark A$		2A correct national road		MP
				(2)	L1
2.1.2	Southeast OR SE ✓✓A		2A correct direction		MP
				(2)	L1
2.1.3	Map distance = $7 \text{ km} \times 100 000 \checkmark \text{C}$		1C conversion		MP
	$= 700\ 000\ \mathrm{cm}$		1M dividing by scale		L2
	· 700 000		1CA man distance		
			18 rounding		
	$= 12.5 \text{ cm } \checkmark \text{CA}$		Incrounding		
	\approx 13 cm \checkmark R				
			OR		
	OR		OR		
	56 000				
	Map distance = $\frac{30000}{100000}$				
	$= 0.56 \text{ m} \checkmark C$		1C conversion		
	$\therefore \frac{7}{0.56} \sqrt{M}$ = 12,5 cm \sqrt{CA}		1M dividing by scale		
			1CA man distance		
			1P rounding	(A)	
	$\approx 13 \text{ cm } \checkmark \text{R}$		TK Tounding	(4)	
	Distance				
2.2.1	Speed $=\frac{Distance}{Time}$	Accept if calculated	1SF substitution		MP
	$100 \text{ km}/\text{k} = \frac{11,2 \text{ km}}{12,2 \text{ km}}$	the time as follows:	1M changing subject of		L3
	$100 \text{ km/h} = \frac{100 \text{ km/h}}{100 \text{ km/h}} \sqrt{SF}$	the time us follows:	formula		
	\therefore Time = $\frac{11,2 \text{ km}}{100 \text{ km}} \checkmark \text{M}$	$= 0.112 \times 60$	1C converting hours to		
	$100 \ km/n$ - 0.112 hours × 60. (C	= 6 minutes 43.2 sec	minutes		
	$= 0.112 \text{ nours} \times 00 \vee 0 = 0 \text{ influtes}, 45, 45, 45, 45, 45, 45, 45, 45, 45, 45$		1CA time		
	-0.72 minutes \sqrt{CA}	(Tun marks)	NPR		
	(Accept / minutes)			(4)	
	✓M		1M multiplying by 2		MP
2.2.2	Total Distance = $(11, 2 \text{ km} \times 2) + 1$	l 56 km √ M	1M adding 156 km		L2
	$= 178,4 \text{ km } \checkmark \text{A}$		1A total distance	(3)	



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6	MATHEMATICAL LITERACY P2	(EC/NOVE	MBER 2024)
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2.2.3	Number of litres of petrol = $\frac{178,4}{100} \times 5,7 \checkmark M$ = 10,1688 litres $\checkmark A$ \therefore Cost = R24,45 × 10,1688 $\checkmark M$ = R248,63 $\checkmark MCA$ \therefore Her statement is valid $\checkmark O$ OR	CA from 2.2.2 1M dividing by 100 and multiplying with 5,7 1A number of litres 1M multiply with R24,45 1MCA petrol cost 1O opinion OR	F L4
	Number of litres of petrol = $\frac{5.7}{100} \times 178,4 \checkmark M$ = 10,1688 litres $\checkmark A$ \therefore Cost = R24,45 × 10,1688 $\checkmark M$ = R248,63 $\checkmark MCA$ \therefore Her statement is valid $\checkmark O$	1M dividing by 100 and multiplying with 178,4 1A no. of litres 1M multiply with R24,45 1MCA petrol cost 1O opinion (5)	



QUESTION 3 [34 MARKS]

Ques.	Solution	Explanation	Level		
3.1.1	Volume is the amount of space inside the fish tank. $\checkmark \checkmark A$	2A definition	М		
		(2)	L1		
3.1.2	Volume of a cylindrical prism = $\pi \times \text{radius}^2 \times \text{height}$	1SF substitution	М		
	$38,8 \text{ ft}^3 = 3,142 \times 2,1^2 \times \text{height } \checkmark \text{SF}$	1M divide correct values	L2		
	$38,8 \text{ ft}^3 = 13,85622 \times \text{height}$	1CA height			
	\therefore Height = $\frac{38,8}{\sqrt{M}}$				
	13,85622 -2.9 fact (G)				
	- 2,8 1001 V CA	(3)			
3.1.3	$^{\circ}C = (^{\circ}F - 32^{\circ}) \times \frac{5}{2}$	1SF substitution	М		
	(79)	1A temperature	L4		
	$=(72^{\circ}F - 32^{\circ}) \times \frac{1}{9} \checkmark SF$	10 opinion			
	= 22,222				
	\approx 22,2 °C \checkmark A				
	∴ Hein's claim is valid ✓O	(3)			
3.1.4	Volume of stones = $87\% - 75\% \checkmark M$	1M subtracting	М		
	$= 12\% \checkmark A$	percentages	L3		
	$\therefore \frac{12}{100} \times 38.8 \sqrt{M}$	1A correct %			
	$= 4.656 \text{ ft}^3$ (CA	1M multiply with 38,8			
	$\sim 4.7 \text{ ft}^3$ /p	1CA volume of stones			
	\sim +,7 it v K	1R rounding			
	OR				
	UK UK	OR			
	Volume of water and stance in tentr = $\frac{87}{3}$ × 20.0 (1)				
	Volume of water and stones in tank $-\frac{100}{100} \times 30.0 \sqrt{M}$	1M calculating 87%			
	$= 33,756 \text{ ft}^3$				
	75				
	Volume of water before stones added = $\frac{73}{100} \times 38,8 \sqrt{M}$	IM calculating 75%			
	=29,1 ft ³				
	\therefore Volume of stones = 33,756 ft ³ – 29,1 ft ³ \checkmark M	1 M malting at in a second			
	$=4,656 \text{ ft}^3 \checkmark \text{CA}$	1 NI subtracting volumes			
	\approx 4,7 ft ³ \checkmark R	ICA volume of stones			
		IK rounding (5)			
215		1 A compact for sting	р		
3.1.3	$Probability = \frac{1}{7} \checkmark_A \times 100 \% \checkmark_M$	IA correct fraction			
	= 14,2857	10A grad a bility 0/	LZ		
	≈ 14,29% ✓CA	ICA probability as %			
	(Accept 14,3% OR 14,286%)				
		(3)			
		1			

7

8		MATHEMATICAL LITERACY P2	(EC/NOVEMBER 2024)	
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	3.2.1	Total SA = $[2(1 \times w) + 2(1 \times h) + 2(w \times h)]$	1C conversion	М
		√C	1SF substitution	L2
		= $[2(240 \times 112) + 2(240 \times 70) + 2(112 \times 70)]/SF$	1S simplification	
		$= 53\ 760 + 33\ 600 + 15\ 680\ \checkmark \text{S}$	1CA total SA	
		$= 103 \ 040 \ \mathrm{mm^2} \sqrt{\mathrm{CA}}$	(4)	
	3.2.2	Number of complete pallets = $\frac{2500}{2} \sqrt{MA}$	1MA dividing correct	Μ
		$= 5 \text{ nallets} \cdot (A)$	values	L1
		5 panets V A	1A number of pallets	
			(2)	
	3.2.3	Weight of one pallet = $\frac{9187}{5} \sqrt{M}$	1M dividing weight by 5	Μ
		= 1.837.5 kg	1C conversion	L2
		$=\frac{1837,5}{\sqrt{C}}$	1CA weight of one pallet	
		$= 1,83/5 \text{ ton } \checkmark \text{CA}$		
			OP	
		- OK	U R	
		Weight of one nallet = $500 \times 3.675 \sqrt{M}$	1M multiplying 500 with	
		= 1.837.5 kg	3.675	
		1.037,5 Mg	1C conversion	
		$ = \frac{1}{1000} \vee C$	1CA weight of one pallet	
		$= 1,8375 \text{ ton } \checkmark \text{CA}$	(3)	
	3.2.4	Volume of a rectangular prism = Length \times Width \times Height		М
		$= 240 \text{ mm} \times 112 \text{ mm} \times 70 \text{ mm}^{\text{SF}}$	1SF substitution	L4
		$= 1 881 600 \text{ mm}^3$		
		$\therefore 1 881 600 \times 2 500 \checkmark M$	1M multiply volume with	
		$=4\ 704\ 000\ 000\ \mathrm{mm}^3$	2 500 bricks	
		$\frac{4704000000}{1000000} \checkmark C$		
		$= 4.704 \text{ m}^3 \sqrt{C} \text{ A}$	$1C$ convert volume to m^3	
		$\approx 4.7 \text{ m}^3$	1CA volume of all bricks	
		\therefore Hein's claim is correct $\sqrt{0}$	10 opinion	
		OR	OR	
		Volume of a rectangular prism = Length \times Width \times Height		
		-0.24 ± 2.0112 C -0.070 SF -1	1C conversion	
		$= 0.24 \text{ m} \times 0.112 \text{ m} \times 0.070 \text{ m}$ = 0.0018816	1SF substitution	
		$= 0.0018816 \text{ m}^{-1}$		
		-4.704 m^3	1M multiply volume with	
		\sim 4.7 m ³	2 500 bricks	
		~ 4, / 111	1CA volume of all bricks	
		\cdot Hein's claim is correct $\sqrt{0}$	10 opinion	
			(5)	

(EC/NOVEMBER 202	24) MATHEMATI	ICAL LITERACY P2	9
Dow	Inloaded from Stanmorephys	sics.com	
3.2.5 Total	cost = $R2,60 \times 2500 \checkmark M$ = $R6500 + R650$ (delivery) $\checkmark M$ = $R7150 \checkmark CA$ $\approx R7200 \checkmark R$	1M multiply cost with number of bricks 1M adding delivery costs 1CA total cost 1R rounding	F L2
		[34]	





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QUESTION 4 [26 MARKS]

Ques.SolutionExplanationLephantion4.1.1Graphic scale \checkmark A OR Bar scale \checkmark A OR Linear scale \checkmark A1A bar scaleMP4.1.2Scale = 6,7 cm \checkmark A1A measuring scaleMP4.1.2Scale = 6,7 cm \checkmark A1A measuring scaleMP4.1.2Scale = 6,7 cm \checkmark A1A measuring scaleMP6.7 cm - 12 miles1 cm : 1.791044776 miles \checkmark CA1A measuring scaleMP1 cm : 1.791044776 miles \checkmark CA1M divide by 6,71CA scaleMP1 cm : 1.791044776 miles \checkmark CA1M multiply 10,5cm with the scale1CA actual distance(Accept 18.806 miles OR 19 miles)(5)(5)(6)4.1.3Time = <i>Bistance</i> If calculated as follows, 00 NOT c = 25,694 minutesIf calculated as follows, 00 NOT enalize:SF substitution 1 Converting hours to minutesMP L44.1.4Probability = 13:30:000 (departure) 01:25:42 (travelling) \checkmark 00:25:00 (stop at petrol station) = 15:2042./CAIf calculated as follows, 00:25 = 15:21IM diding time 1CA arrival time 10 opinion4.1.4Probability = $\frac{2}{s} \checkmark$ \checkmark (Accept simplified form = $\frac{1}{s} \bigvee_{\Delta}$ (Accept simplified form = $\frac{1}{s} \bigvee_{\Delta}$ (Accept simplified form = 22 inches $\approx 2,54 < C$ $\approx 48 cm \checkmark CAIM finding arcaIM dividing arcaby length1CA area of whitecloth4.2.2Length of wooden frame = 22 inches \approx 2,54 < C\approx 48 cm \checkmark CAIC avaitingIA answer\approx 48 cm \checkmark CAIM finding arcaby lengthICA widthICA width$	-					
4.1.1Graphic scale \checkmark A OR Bar scale \checkmark A OR Linear scale \checkmark AIA bar scale \checkmark AMPRatio scale \checkmark A OR Numeric scale \checkmark AIA bar scale (2)II bar scale (2)II bar scale (2)4.1.2Scale - 6.7 cm \checkmark A 6.7 cm - 12 miles $\frac{6.7 cm}{6.7}$ - $\frac{6.7 cm}{6.7}$ IA measuring scale in cm - 12.391044776 miles \checkmark CA $= 18.8057015$ miles \checkmark CA $= 1.4282 hours= 0.25.694 minutes 2= 3.30.60 (departure)= 1.520.42 (CA) (departure)= 15.20.42 (CA) (departure) (CA) (departure)= 15.20.42 (CA) (departure) (CA) (departure)= 15.20.42 (CA) (departure) $	Ques.	Solution			Explanation	Level
Ratio scale \checkmark A OR Numeric scale \checkmark_A IA number scaleL14.1.2Scale = 6,7 cm \checkmark_A IA number scaleL14.1.2Scale = 6,7 cm \checkmark_A IA measuring scaleMP6,7 cm - 12 miles $\leftarrow 5,7$ Im scale \checkmark_A IA measuring scaleMP1 cm :=1,79104776 miles \checkmark_CA IA mustiply 10,5IM divide by 6,7ICA scale(Accept 18,806 miles OR 19 miles)IA actual distanceNPRIA actual distanceNPR(Accept 18,806 miles OR 19 miles)ICA actual distanceNPRISF substitutionICA actual distance4.1.3Time = $\frac{pistance}{speat}$ IF calculated as follows, DO NOT penalize:ISF substitutionMP4.1.3Time = $\frac{130000}{(42024007C)}$ IF calculated as follows, DO NOT penalize:IM adding timeIAatrival time = 13:30:00 (departure) 01:25:42 (travelling) $\checkmark M$ 00:25:00 (stop at petrol station) $= 15:20:42 < (TA IM adding timeICA travel timeIA numeratorIA denominatorICA arrival timeP41.4Probability -\frac{2}{8}\checkmark A(Accept simplified form -\frac{4}{4}) \checkmark AIM finding radiusISF substitutionICA area of whiteold the cale is -55.88 \simeq \% AArea of a circle = 55.88 \simeq \% AArea of a circle = 1200 \times \% A\le 65.88 \le \% AArea of a circle = 1200 \times \% A\le 65.88 \simeq \% AArea of a circle = 1200 \times \% A\le 65.88 \simeq \% AArea of a circle = 1200 \times \% A\le 65.88 \simeq \% AArea of a circle = 1200 \times \% A\le 65.88 \le \% AArea of a circle = 1200 \times \% A\le 65.88 \simeq \% AArea of a circle = 1200 \times \% A\le 70.89 \times \% AArea of a circle = 1200 \times \% A\le 65.88 \simeq \% A<$	4.1.1	Graphic scale \checkmark A OR Bar scale \checkmark A OR Lin	near scale √A		1A bar scale	MP
4.1.2Scale = 6,7 cm $\checkmark A$ 6,7 cm = 12 miles 6,7 cm = 12 miles 6,7 cm = 12 miles 12 miles 1 cm : 1.791044776 miles $\checkmark CA$ 1 cm : 1.791044776 miles $\checkmark CA$ 1 stassp37015 miles 18.805 miles $\bigcirc CA$ 18.805 miles $\bigcirc CA$ 14.1.3IA measuring scale in cm 18.805 miles $\bigcirc CA$ 16 m with the scale ICA actual distance NPRMP L3 L3 L3 CA actual distance NPR4.1.3Time = $\frac{pistemce}{speed}$ = 14.282 hours $\therefore 0.4282 \times 60 \checkmark C$ $= 15.20.42 \checkmark CA$ If calculated as follows, DO NOT penalize: Travel time = 15.20.42 $\checkmark CA$ ISF substitution 1C converting hours to minutes 1CA arrival time $= 15.20.42 \checkmark CA$ 4.1.4Probability = $\frac{2}{2} \checkmark A$ $(Accept simplified form -\frac{1}{2} \checkmark A\land cra of a circle = \pi \times radius^2= 70.891375\approx 70.89 cm^2 \checkmark CAIA numeratorIA minutes= 55.88 cm \checkmark A\land Area of rectangle = length \times width2 682 = 55.88 cm \checkmark A\land CAIM finding radiusISF substitutionICA arrival timeIO opinion42.21Length of wooden frame = 22 inches \times 2.54 \checkmark C= 55.88 cm \land A\land a ch \odot a dm \checkmark A^22 625 m \checkmark A\land CAIM finding radiusISF substitutionICA area of whitedoth42.22Length of wooden frame = 22 inches \times 2.54 \checkmark C= 55.88 cm \land A\land a ch CA\land Area of rectangle = length \times width2 682 = 55.88 \simeq m/A\land Area of rectangle = length \times width2 682 = 55.88 \simeq m/A\land Area of rectangle = length \times width2 682 = 55.88 \simeq m/A\land Area of rectangle = length \times width2 682 = 55.88 \simeq m/A\land Area of rectangle = le$		Ratio scale \checkmark A OR Numeric scale \checkmark A			1A number scale	L1
4.1.2Seale = 6,7 cm \checkmark_A 1A measuring seale in cm 1 cm : 1,79104776 miles \checkmark_A MP L31.1 cm : 1,79104776 miles \checkmark_A 1A measuring seale in cm 1 cm : 1,79104776 miles \checkmark_A MP L31.1 cm : 1,79104776 miles \checkmark_A 1A measuring seale in cm 1 cm : 1,79104776 miles \checkmark_A MP L31.1 cm : 1,79104776 miles \checkmark_A 1A measuring seale in cm 1 cm : 1,79104776 miles \checkmark_A MP L31.1 cm : 1,79104776 miles \checkmark_A MM intes \checkmark_A MP in multiplice1.1 cm : 1,79104776 miles \checkmark_A MM intes \checkmark_A MP intes \sim_A 1.1 cm : 1,79104776 miles \checkmark_A MM intes \sim_A MM intes \sim_A 1.1 cm : 1,79104776 miles \checkmark_A MM intes \sim_A MM intes \sim_A 1.1 cm : 1,79104776 miles \checkmark_A MM intes \sim_A MM intes \sim_A 1.1 cm : 1,79104776 miles \checkmark_A MM intes \sim_A MM intes \sim_A 1.1 cm : 1,79104776 miles \checkmark_A MM intes \sim_A MM intes \sim_A 1.1 cm : 1,79104776Miles \sim_A MM intes \sim_A 1.1 cm : 1,92047776Miles \sim_A MM intes \sim_A 1.1 cm : 1,920427776Miles \sim_A MM intes \sim_A 1.1 cm : 1,920427776Miles \sim_A MM intes \sim_A 1.2 cm : 1,920427776Miles \sim_A Miles \sim_A <td< th=""><th></th><th></th><th></th><th></th><th>(2)</th><th></th></td<>					(2)	
4.1.2 Scale = 6.7 cm $\checkmark \land$ 6.7 cm = 12 miles 6.7 cm = 12 miles 18.805 miles $\checkmark CA$ (Accept 18.806 miles QR 19 miles) 4.1.3 Time = $\frac{Distance}{msred}$ $= \frac{15214 miles}{58red}$ $= 1.4282 \land 60 \lor C$ = 25.694 minutes $\therefore 0.4282 \land 60 \lor C$ = 25.694 minutes $\therefore Time = 1 hour 25 minutes 42 seconds \checkmark CAArrival time = 13:30:00 (departure)0.125:42 (travelling) \checkmark M0.25:20$ (200 at petrol station) $- \frac{15:20:42 \lor CA}{2:25:20}$ (200 miles $\sim 2.54 \lor C$ $= 70.89:1375 \approx 70.89 \text{ cm}^2 \land CA$ 4.2.2 Length of wooden frame = 22 inches $\approx 2.54 \lor C$ $= 70.89:1375 \approx 70.89 \text{ cm}^2 \land CA$ (3) 4.2.2 Length of wooden frame = 22 inches $\approx 2.54 \lor C$ $= 3.142 \times 4.75^2 \lor SF$ $= 70.89:1375 \approx 70.89 \text{ cm}^2 \land CA$ (3) 4.2.2 Length of wooden frame = 22 inches $\approx 2.54 \lor C$ $\approx 70.89:1375 \approx 70.89 \text{ cm}^2 \land CA$ (3) 4.2.2 Length of wooden frame = 22 inches $\approx 2.54 \lor C$ $\approx 3.80 \Leftrightarrow CA$ (Aanvaar 47.996 cm) (Aanvaar 47.996 cm) (C) mile form $= \frac{1}{52:80} \checkmark M$ $= 47.9957 \approx 48 \text{ cm} \lor CA$ (Aanvaar 47.996 cm)						
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a_{1}^{0} a_{2}^{0} a_{1}^{0} $ CA \text{ scale}$ $ CA \text{ scale} $ <th< th=""><th></th><th>$\frac{6.7 \text{ cm}}{6.7} = \frac{12 \text{ miles}}{6.7} \sqrt{M}$</th><th></th><th></th><th>1M divide by 6,7</th><th></th></th<>		$\frac{6.7 \text{ cm}}{6.7} = \frac{12 \text{ miles}}{6.7} \sqrt{M}$			1M divide by 6,7	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		$1 \text{ cm} \cdot 1$ 791044776 miles (α			1CA scale	
A Tread adding in Result of the result of		: Actual distance = $10.5 \text{ cm} \times 1.7910$			1M multiply 10,5	
ICA actual distance NPR4.1.3Time $= \frac{Distance}{Speed}$ $= \frac{12424 miles}{124 miles}$ / SF $= 1,4282$ hours $: 0.04282 \times 60 \cdot C$ $= 25,694$ minutes $: Time = 1 hour 25 minutes 42 seconds \checkmark CAIf calculateda follows,DO NOTpenalize:Travel time= 13:300:225.20 (stop at petrol station)= \frac{15:20:42}{2} \cdot CAIf calculateda follows,DO NOTpenalize:Travel time= 13:300:225.20 (stop at petrol station)= \frac{15:20:42}{2} \cdot CAIM adding time1CA arrival time= 13:300:2250:2254.1.4Probability = \frac{2}{8} \cdot \sqrt{A}(Accept simplified form = \frac{1}{4} \cdot \sqrt{A}IA numerator15:20:42 \cdot CA: His claim is invalid. \checkmark OP4.1.4Probability = \frac{2}{8} \cdot \sqrt{A}(Accept simplified form = \frac{1}{4} \cdot \sqrt{A}IA numerator15:20:12 \cdot CAP4.1.4Probability = \frac{2}{8} \cdot \sqrt{A}(Accept simplified form = \frac{1}{4} \cdot \sqrt{A}IM finding radius15:5 substitution1CA area of whiteclothM4.2.1Radius = \frac{9.5}{2} = 4.75 \text{ cm } \sqrt{M}Area of a circle = \pi \times radius^2= 3,142 \times 4.75^2 \vee SF= 70,891375\approx 70.89 \text{ cm}^2 \cdot CAIM finding radius1SF substitution1CA area of whiteclothM4.2.2Length of wooden frame = 22 inches \times 2.54 \cdot C= 55.88 \times m \cdot AArea of rectangle = -length \times width2 682 = 55.88 \times m \cdot AArea of rectangle = -length \times width2 682 = 55.88 \times m \cdot AArea of rectangle = -length \times width2 682 = 55.88 \times m \cdot AArea of rectangle = -length \times width2 682 = 55.88 \times m \cdot AArea of rectangle = -length \times width2 682 = 55.88 \times m \cdot CAIC convertinglength1A answer$		= 18.80597015 miles			cm with the scale	
(Accept 18,806 miles OR 19 miles)NPR4.1.3Time $= \frac{Distance}{speed}$ $= 134282$ hours $$ 0.4282 $\times 60 \lor C$ $= 25,694$ minutes 2.500 (stop at petrol station) $= \frac{15:20:42}{0} \lor CA$ If calculated as follows, DO NOT penalize: Travel time $= 13:30$ $0:255:00$ (stop at petrol station) $= \frac{15:20:42}{0} \lor CA$ If calculated as follows, DO NOT penalize: Travel time $= 13:30$ $0:25:00$ (stop at petrol station) $= \frac{15:20:42}{0} \lor CA$ IM adding time $1CA arrival time= 13:300:25:00 (stop at petrol station)= \frac{15:20:42}{0} \lor CAIM adding time1CA arrival time= 0:25 = \frac{15:21}{0}4.1.4Probability = \frac{2}{3} \lor A(Accept simplified form = \frac{1}{4} \lor AIA numerator1A adenominator2 \ SI = 5:388 \ cold \ SI = 70.891375\approx 70.890 \ cold \ cold \ SI = 55.88 \ cold \ SI = 35.88 \ cold \ SI \ SI = 35.88 \ cold \ SI = 35.88 \ cold \ SI \ cold \ SI \ SI = 35.88 \ co$		≈ 18.81 miles / CA			1CA actual distance	
4.1.3Time $= \frac{Distance}{speed}$ $= \frac{1243 mites}{143 mites}$ / SF $= 1,4282$ hours $\therefore 0,4282 \times 60 \lor C$ $= 25,694$ minutes \therefore Time = 1 hour 25 minutes 42 seconds \checkmark CAIf calculated as follows, DO NOT penalize: Travel time $= 1h26 min$ $Arrival time = 13:30:00$ (departure) $01:25:42$ (traveling) \checkmark M $01:25:42$ (traveling) \checkmark M $01:25:42$ (traveling) \checkmark M $01:25:42$ (traveling) \checkmark M $01:25:20:42 \lor CA$ ISF substitution IC converting hours to minutes $IA arrival time$ $= 13:30$ $01:25 = 15:21$ IM adding time ICA arrival time $IA adding timeICA arrival timeICA arrival timeIO opinion4.1.4Probability = \frac{2}{8} \checkmark A(Accept simplified form = \frac{1}{2}) \checkmark AIA numerator13:221PIA denominator4.1.4Probability = \frac{2}{8} = 4,75 \text{ cm} \checkmark MArea of a circle = \pi \times radius^2= 3,142 \times 4,75^2 \lor SF= 70,891375\approx 70.89 \text{ cm}^2 \checkmark CAIM finding radiusSF substitutionICA area of whiteelothMISF substitutionICA area of whiteeloth42.2Length of wooden frame = 22 inches \times 2,54 \checkmark C= 55,88 \text{ cm} \land AAArea of rectangle = length \times width2 682 = 55,88 \text{ cm} \land A= 47,9957 \dots\approx 48 \text{ cm} \checkmark CAISF substitutionISF $		(Accent 18 806 miles OR 19 miles)			NPR	
4.1.3Time $=\frac{bistance}{Speed}$ $=\frac{121,4miles}{8\pi niles/n} \sqrt{SF}$ $= 1,4282, hours: 0,04282, 60 \sqrt{C}=25,694 minutes: Time = 1 hour 25 minutes 42 seconds \sqrt{CA}Arrival time = 13:30:00 (departure)01:25:42 (travelling) \sqrt{M}00:25:00 (stop at petrol station)=\frac{15:20:42}{12:20} \sqrt{CA}: His claim is invalid. \sqrt{O}If calculatedas follows,DO NOTpenalize:Travel time=1h26 minArrival time=13:3001:2501:25:42 (travelling) \sqrt{M}00:25:00 (stop at petrol station)=\frac{15:20:42}{15:21}IM adding timeICA arrival time=100 opinionMML44.1.4Probability =\frac{2}{8} \sqrt{A}(Accept simplified form -\frac{1}{4}/\sqrt{A}IA numerator1A denominatorPL24.2.1Radius=\frac{9.5}{2} = 4.75 \text{ cm} \sqrt{M}Area of a circle = \pi \times radius^2= 70.89 \text{ cm}^2 \sqrt{A}IM finding radiusISF substitutionICA area of whiteelothML24.2.2Length of wooden frame = 22 inches \times 2,54 \sqrt{C}= 70.89 \text{ cm}^2 \sqrt{CA}IN finding radiusISF substitutionICA area of whiteelothML34.2.2Length of wooden frame = 22 inches \times 2,54 \sqrt{C}= 70.89 \text{ cm}^2 \sqrt{CA}IC convertinglengthIA answerML34.2.2Length of wooden frame = 22 inches \times 2,54 \sqrt{C}= 70.89 \text{ cm}^2 \sqrt{CA}ISF substitutionICA area of whiteelothML34.2.42.682 = 55.88 \times width \sim SF\approx 48 \text{ cm} < CAISF substitutionIM dividing areaby lengthML34.2.4Length of wooden frame = 22 inches \sim 2,54 \sqrt{C}\approx 48 \text{ cm} < CAICA width(5)$		(recept 10,000 miles OK 17 miles)			(5)	
4.1.3 Time = $\frac{Distance}{Speed}$ = $\frac{121,4 \text{ miles}}{68 \text{ miles}/h} \checkmark SF$ = 1,4282 k0v s $\therefore 0,4282 k0v c$ = 25,694 minutes $\therefore \text{ Time = 1 hour 25 minutes } 42 \text{ seconds } \checkmark CA$ Arrival time = 13:30:00 (departure) 01:25:42 (travelling) $\checkmark M$ 00:25:00 (stop at petrol station) = $15:20:42 \lor CA$ $\therefore \text{ His claim is invalid.} \checkmark O$ 4.1.4 Probability = $\frac{2}{8} \checkmark A$ (Accept simplified form = $\frac{1}{4} \bigvee A$ Area of a circle = $\pi \times \text{ radius}^2$ = $3,142 \times 4,75^2 \lor \text{SF}$ = $3,142 \times 4,75^2 \lor \text{SF}$ = $70.89 \text{ cm}^2 \lor CA$ 4.2.2 Length of wooden frame = 22 inches $\times 2,54 \lor C$ $= 55,88 \text{ width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{282}{55,88} \lor \text{ width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{282}{55,88} \lor \text{width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{283}{55,88} \lor \text{Width} \checkmark \text{SF}$ $\therefore \text{Width} = \frac{283}{55,88} \lor \text{Width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{283}{55,88} \lor \text{Width} \checkmark \text{SF}$ $\therefore \text{Width} = \frac{283}{55,88} \lor \text{Width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{283}{55,88} \lor \text{Width} \checkmark \text{SF}$ $\therefore \text{Width} = \frac{283}{55,88} \lor \text{Width} \lor \text{SF}$ $\therefore \text{A a con } \checkmark \text{CA}$ $(\text{Aanvaar 47,996 \text{ cm})$						
$\frac{124}{4.1.4} = \frac{121.4 \text{ miles}}{95 \text{ miles}/h} \sqrt{SF}$ $= 1.4282 \text{ hours}$ $\therefore 0.4282 \times 60 \sqrt{C}$ $= 25.694 \text{ minutes}$ $\therefore \text{ Time = 1 hour 25 \text{ minutes} 42 \text{ seconds } \sqrt{CA}$ $Arrival time = 13.30:00 (departure)$ $01:25:42 (travelling) \sqrt{M}$ $00:25:00 (stop at petrol station)$ $= \frac{15:20:42}{2}\sqrt{CA}$ $\therefore \text{ His claim is invalid.} \sqrt{O}$ $4.1.4$ $Probability = \frac{2}{8} \sqrt{A}$ $(Accept simplified form = \frac{1}{4})\sqrt{A}$ $Area of a circle = \pi \times radius^{2}$ $= 3.142 \times 4.75^{2}\sqrt{SF}$ $= 70.89 \text{ m}^{2} \sqrt{CA}$ $4.2.2$ $Length of wooden frame = 22 inches \times 2.54 \sqrt{C} = 55.88 \text{ m} \sqrt{A} Area of rectangle = length \times width 2 682 = 55.88 \times width \sqrt{SF} \therefore Width = \frac{2.86}{55.89} \sqrt{M} = 47.9957 \dots \approx 48 \text{ cm } \sqrt{CA} (Aanvaar 47,996 \text{ cm}) Is f substitution IC converting hours to minutes ICA travel time ICA travel time IM adding time ICA arrival time IO \text{ opinion} IM adding time ICA arrival time IO opinion IC \text{ converting} IM adding time ICA arrival time IO opinion IC \text{ converting} IM adding time ICA arrival time IO opinion IC \text{ converting} IM adding time ICA arrival time IO opinion IC \text{ converting} IA \text{ numerator} IA \text{ anumerator} IA anumerat$	4.1.3	Time $=\frac{Distance}{Canada}$	If calculated			MP
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Speed 121,4 miles	as follows			L4
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		$=\frac{1}{85 \text{ miles/h}} \checkmark \text{SF}$	DO NOT		1SF substitution	
$\begin{array}{c c} \therefore 0.4282 \times 60 \checkmark C \\ = 25,694 \text{ minutes} \\ \therefore \text{ Time = 1 hour 25 minutes 42 seconds \checkmark CA} \\ \text{Arrival time = 13:30:00 (departure)} \\ 01:25:42 (travelling) \checkmark M \\ 00:25:00 (stop at petrol station) \\ = \underline{15:20:42} \checkmark CA \\ \therefore \text{ His claim is invalid.} \checkmark O \\ \hline \\ 4.1.4 \\ \begin{array}{c} \text{Probability = } \frac{2}{8} \checkmark A \\ (\text{Accept simplified form = } \frac{1}{4}) \checkmark A \\ (\text{Accept simplified form = } \frac{1}{4}) \checkmark A \\ Area of a circle = \pi \times radius^{2} \\ = 70,891375 \\ \approx 70,89 \text{ cm}^{2} \checkmark CA \\ Area of rectangle = lengh \times width \\ 2 \ 682 = 55,88 \ width \checkmark SF \\ \therefore \text{ Width = } \frac{2682}{55,88} \checkmark M \\ = 47,9957 \dots \\ \approx 48 \ cm \checkmark CA \\ (\text{Aanvaar 47,996 cm)} \\ \end{array}$		= 1,4282 hours	nenalize:		1C converting	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		$\therefore 0,4282 \times 60 \checkmark C$	penanze:		hours to minutes	
$\therefore \text{ Time } = 1 \text{ hour } 25 \text{ minutes } 42 \text{ seconds } \checkmark \text{CA}$ $Arrival \text{ time } = 13:30:00 \text{ (departure)} \\ 01:25:42 \text{ (travelling) } \checkmark \text{M} \\ 00:25:00 \text{ (stop at petrol station)} \\ = \underline{15:20:42} \checkmark \text{CA} \\ \therefore \text{ His claim is invalid. } \checkmark \text{O}$ $4.1.4 \text{Probability } = \frac{2}{8} \checkmark \text{A} \\ (\text{Accept simplified form } = \frac{1}{4}) \checkmark \text{A} \\ (\text{Accept simplified form } = \frac{1}{4}) \checkmark \text{A} \\ Area of a circle = \pi \times \text{radius}^2 \\ = 3,142 \times 4,75^2 \lor \text{SF} \\ = 70,891375 \\ \approx 70,890 \text{ cm}^2 \checkmark \text{CA} \\ Area of rectangle = length \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ 2 \text{ 682 } = 55,88 \text{ cm } \land \text{A} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of rectangle = length } \times \text{width} \\ \text{Area of white} \\ \text{(Aanvaar 47,996 cm)}$		= 25,694 minutes	Travel time		1CA travel time	
Arrival time = 13:30:00 (departure) 01:25:42 (travelling) $\checkmark M$ 00:25:00 (stop at petrol station) = $\frac{15:20:42}{2} \checkmark CA$ IM adding time 13:30 01:26 00:25 = $\frac{15:21}$ 4.1.4Probability = $\frac{2}{8} \checkmark A$ (Accept simplified form = $\frac{1}{4}$) $\checkmark A$ IA numerator IA denominatorP I.24.1.4Probability = $\frac{2}{8} \checkmark A$ (Accept simplified form = $\frac{1}{4}$) $\checkmark A$ IM adding time 10:25 = $\frac{15:21}$ IA numerator IA denominator4.2.1Radius = $\frac{9.5}{2}$ = 4,75 cm $\checkmark M$ Area of a circle = $\pi \times$ radius² = 3,142 $\times 4,75^2 \checkmark SF$ = 70,891375 $\approx 70,89$ cm² $\checkmark CA$ IM finding radius ISF substitution ICA area of white eloth4.2.2Length of wooden frame = 22 inches $\times 2,54 \checkmark C$ = $55,88 \text{ cm} \checkmark A$ Area of rectangle = length \times width $2 682 = 55,88 \times$ width $\checkmark SF$ \therefore Width $= \frac{2682}{55,88} \checkmark M$ $= 47,9957 \dots$ $\approx 48 \text{ cm} \checkmark CA$ ISF substitution IM dividing area by lengthM L3(Aanvaar 47,996 cm)ICA widthICA widthICA width		\therefore Time = 1 hour 25 minutes 42 seconds \checkmark CA	= 1h26 min			
Arrival time = 13:30:00 (departure) 01:25:42 (travelling) $\checkmark M$ $00:25:00$ (stop at petrol station) = 15:20:42 $\checkmark CA$ IM adding time ICA arrival time IO opinion. His claim is invalid. $\checkmark O$ IM adding time ICA arrival time IO opinion4.1.4Probability $=\frac{2}{8} \checkmark A$ $\checkmark A$ (Accept simplified form $=\frac{1}{4} \checkmark A$ $\checkmark A$ IA numerator IA denominatorP L24.2.1Radius $=\frac{9.5}{2} = 4.75 \text{ cm} \checkmark M$ Area of a circle $= \pi \times \text{radius}^2$ $= 3.142 \times 4.75^2 \checkmark \text{SF}$ $= 70.891375$ $\approx 70.89 \text{ cm}^2 \checkmark \text{CA}$ IM finding radius ISF substitution ICA area of white clothM L24.2.2Length of wooden frame = 22 inches $\times 2.54 \checkmark \text{C}$ $= 55.88 \times \text{width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{2.682}{55.89} \checkmark M$ $= 47.9957 \dots$ $\approx 48 \text{ cm} \checkmark \text{CA}$ IC converting length IA answerM L34.2.2Karvaar 47,996 cm)ICA width ICA widthISF substitution IN dividing area by lengthICA width ICA width			Arrival time			
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$\frac{00:25:00 \text{ (stop at petrol station)}}{= 15:20:42 \lor CA} \xrightarrow{(0):25}{= 15:21} \qquad \text{ICA arrival time IO opinion} \xrightarrow{(6)}$ $4.1.4 \qquad \text{Probability} = \frac{2}{8} \checkmark A \xrightarrow{(A)}{\sqrt{A}} \qquad \text{IA numerator IA denominator} \xrightarrow{(2)}$ $4.2.1 \qquad \text{Radius} = \frac{9.5}{2} = 4,75 \text{ cm} \checkmark M \xrightarrow{(2)}$ $4.2.1 \qquad \text{Radius} = \frac{9.5}{2} = 4,75 \text{ cm} \checkmark M \xrightarrow{(2)}$ $4.2.1 \qquad \text{Radius} = \frac{9.5}{2} = 4,75 \text{ cm} \checkmark M \xrightarrow{(2)}$ $4.2.2 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.2 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.2 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.2 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Area of rectangle} = \text{length } \times \text{ width} \xrightarrow{(2)}$ $4.2.2 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 22 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 24 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 24 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 24 \text{ inches } \times 2,54 \checkmark C \xrightarrow{(3)}$ $4.2.4 \qquad \text{Length of wooden frame} = 247,9957 \dots \xrightarrow{(3)} \approx 48 \text{ cm} \checkmark CA \xrightarrow{(4)}$ $(\text{Aanvaar 47,996 cm)}$ $4.2 \qquad \text{Length of (5)}$		01:25:42 (travelling) √M	01:26		IM adding time	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		$\underline{00:25:00}$ (stop at petrol station)	00:25		ICA arrival time	
\therefore His claim is invalid. \checkmark O \square (6)4.1.4Probability $=\frac{2}{8} \checkmark A$ IA numerator 1A denominatorP L24.2.1Radius $=\frac{9.5}{2} = 4,75 \text{ cm} \checkmark M$ Area of a circle $= \pi \times \text{radius}^2$ $= 3,142 \times 4,75^2 \checkmark \text{SF}$ $= 70,891375$ $\approx 70,89 \text{ cm}^2 \checkmark \text{CA}$ IM finding radius ISF substitution ICA area of white elothM L24.2.2Length of wooden frame $= 22$ inches $\times 2,54 \checkmark \text{C}$ $= 55,88 \text{ cm} \checkmark A$ Area of rectangle $= \text{length} \times \text{width}$ $2 682 = 55,88 \times \text{width} \checkmark \text{SF}$ $\therefore \text{ Width} = \frac{2682}{55.88} \checkmark \text{M}$ $= 47,9957 \dots$ $\approx 48 \text{ cm} \checkmark \text{CA}$ ISF substitution IM dividing area by length ICA widthISF substitution IM dividing area by length ICA width		$=$ <u>15:20:42</u> \checkmark CA	$=\frac{15:21}{15:21}$		IO opinion	
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$\begin{array}{c c} = 3,142 \times 4,75^{2} \checkmark SF \\ = 70,891375 \\ \approx 70,89 \ cm^{2} \checkmark CA \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(3)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(1)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(1)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(1)} \end{array}$ $\begin{array}{c c} \text{ICA area of white cloth} \\ \text{(1)} \end{array}$ $\begin{array}{c c} \text{ICA width} \end{array}$ $\begin{array}{c c} \text{ICA width} \end{array}$ $\begin{array}{c c} \text{ICA width} \end{array}$		Area of a circle = $\pi \times radius^2$			ISF substitution	L2
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$\begin{array}{c c} -53,88 \text{ cm } \sqrt{A} \\ \text{Area of rectangle} &= \text{length} \times \text{width} \\ 2 682 &= 55,88 \times \text{width} \checkmark \text{SF} \\ \therefore \text{ Width} &= \frac{2 682}{55,88} \checkmark \text{M} \\ &= 47,9957 \dots \\ \approx 48 \text{ cm } \checkmark \text{CA} \\ \end{array}$	4.2.2	Length of wooden frame = 22 inches × 2,34 \checkmark		INN	longth	
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$\therefore \text{ Width} = \frac{2.682}{55,88} \checkmark \text{M}$ $= 47,9957 \dots$ $\approx 48 \text{ cm} \checkmark \text{CA}$ (Aanvaar 47,996 cm) (SF) (SF) (SF) (SF) (SF) (SF) (SF) (SF		Area or rectangle $-$ religin \wedge which $2 602 - 55.00 \times \text{midth}$				
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(Aanvaar 47,996 cm) 1CA width (5)		$\approx 48 \text{ cm} \checkmark \text{CA}$			by length	
(5)		(Aanvaar 47,996 cm)			1CA width	
					(5)	

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4.2.3	Width of one rectangular bar $=\frac{48}{6} \checkmark MCA$ $= 8 \text{ cm} \checkmark CA$ \therefore Lwandile's claim is valid. $\checkmark O$ OR Width of one rectangular bar $=\frac{47,996}{6} \checkmark MCA$ = 7,9993 cm $\approx 8 \text{ cm} \checkmark CA$ \therefore Lwandile's claim is valid. $\checkmark O$	CA from 4.2.21MCA dividing width by 61CA width of rectangular bar1O opinionOR1MCA dividing width by 61CA width of rectangular bar1O opinion(3)	M L4
		[26]	
		TOTAL: 100	

