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# GAUTENG PROVINCE

EDUCATION  
REPUBLIC OF SOUTH AFRICA

## JUNE EXAMINATION/*JUNIE EKSAMEN* GRADE/*GRAAD* 12

### 2024

## MARKING GUIDELINES/*NASIENRIGLYNE*

### TECHNICAL MATHEMATICS/*TEGNIESE WISKUNDE*

#### (PAPER/*VRAESTEL* 2)

18 pages/*bladsye*

Marking Codes/ <i>Nasienkodes</i>	
<b>A</b>	Accuracy/ <i>Akkuraatheid</i>
<b>CA</b>	Consistent Accuracy/ <i>Volgehoue akkuraatheid</i>
<b>M</b>	Method/ <i>Metode</i>
<b>R</b>	Rounding/ <i>Afronding</i>
<b>NPR</b>	No Penalty for rounding/ <i>Geen penalisering vir afronding</i>
<b>NPU</b>	No Penalty for units omitted/ <i>Geen penalisering vir eenhede weggelaat nie</i>
<b>S</b>	Simplification/ <i>Vereenvoudiging</i>
<b>SF</b>	Substitution in correct formula/ <i>Vervanging in korrekte formule</i>
<b>ST</b>	Statement/ <i>Stelling</i>
<b>ST/RE</b>	Statement and Reason/ <i>Stelling en Rede</i>
<b>RE</b>	Reason/ <i>Rede</i>

#### NOTE/*LET WEL:*

- If a candidate answers a question TWICE, mark only the FIRST attempt./*Indien 'n kandidaat 'n vraag TWEE keer beantwoord, sien slegs die EERSTE poging na.*
- If a candidate strikes off a response to a question and does not attempt the question again, mark the struck off question./*Indien 'n kandidaat 'n antwoord doodtrek en nie poog om die vraag weer te beantwoord nie, sien die doodgetrekte antwoord na.*
- Consistent accuracy applies in all aspects of the marking guidelines, where applicable./*Konstante akkuraatheid word toegepas dwarsdeur die nasienriglyne en waar van toepassing.*



MARKING GUIDELINES/  
NASIENRIGLYNETECHNICAL MATHEMATICS/TEGNIесе WISKUNDE  
(PAPER/VRAESTEL 2)

GR12 0624

## AMENDMENT TO MARKING GUIDELINES JUNE 2024 PROVINCIAL EXAMINATION

ATTENTION

THE CHIEF INVIGILATOR

SUBJECT / VAK	TECHNICAL MATHEMATICS / TEGNIесе WISKUNDE
PAPER / VRAESTEL	2
DATE OF EXAMINATION	3 JUNE / JUNIE 2024

The errata for the Marking Guidelines of TECHNICAL MATHEMATICS P2 has reference.

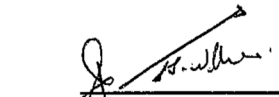
There was a typographical error in **Question 9.2** on both the English and Afrikaans versions of the question paper. This matter was addressed at the Marking Standardisation Meeting.

To ensure that candidates are not disadvantaged and prejudiced in way, you are advised to please ask your Mathematics Educator to **ignore Question 9.2.1** (which counts for 3 marks) when marking.

In other words, the paper must be marked out of a total of 147 instead of 150 and then the learners' marks must be converted to a mark out of 150. E.g., Should a learner attain 85/147 then that mark is recalculated as 87/150.

**Use the formula:**  $\frac{a}{147} \times 100 = b$ . Then,  $\frac{b}{100} \times 150 = c$

*C is the mark that is entered into SASAMS out of 150.*



Mr. Jonathan Williams

**DIRECTOR: EXAMINATIONS MANAGEMENT**  
3 JUNE 2024

**MARKING GUIDELINES/  
NASIENRIGLYNE**

**TECHNICAL MATHEMATICS/TEGNIесе WISKUNDE  
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QUESTION/VRAAG 1			CL
1.1	$AC = \sqrt{(x_A - x_C)^2 + (y_A - y_C)^2}$ $= \sqrt{(-2 - (6))^2 + (-5 - 3)^2}$ $= 8\sqrt{2}$ <p><b>ONE MARK IF ANSWER IS A DECIMAL.</b></p>	<p>✓ SF</p> <p>✓ <math>8\sqrt{2}</math></p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO 2</div> <p>A</p> <p>CA</p>	(2)
1.2	$M_{AC} \left( \frac{x_2 + x_1}{2}; \frac{y_2 + y_1}{2} \right)$ $\left( \frac{(6) + (-2)}{2}; \frac{(3) + (-5)}{2} \right)$ <p>B(2; -1)</p>	<p>✓ <math>x = 2</math></p> <p>✓ <math>y = -1</math></p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO 2</div> <p>A</p> <p>A</p>	(2)
1.3	$m_{AC} = \frac{y_2 - y_1}{x_2 - x_1}$ $= \frac{(3) - (-5)}{(6) - (-2)}$ $= 1$	<p>✓ SF</p> <p>✓ gradient/<i>gradiënt</i></p> <p>A</p> <p>CA</p>	(2)
1.4	$m_{AC} \times m_{BE} = -1$ $\therefore m_{BE} = -1$ <p><math>\tan \theta = -1</math></p> <p>Ref <math>\angle = 45^\circ</math></p> <p><math>\theta = 180^\circ - 45^\circ</math></p> $\therefore \theta = 135^\circ$	<p>✓ <math>m_{BE} = -1</math></p> <p>✓ SF</p> <p>✓ Angle/<i>Hoek</i></p> <p>CA</p> <p>CA</p>	(3)



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1.5	$y - y_1 = m_{BE}(x - x_1)$ $y - (-1) = -1(x - (2))$ $y = -x + 1$  <b>OR/OF</b>  $y = mx + c$ $-1 = -1(2) + c$ $1 = c$ $\therefore y = -x + 1$	✓ SF CA ✓ Equation/Vergelyking CA  <b>OR/OF</b>  ✓ SF CA ✓ Equation/Vergelyking CA (2)		2E
1.6	$y = -x + 1$ $E(-1; p)$  $p = -(-1) + 1$ $\therefore p = 2$ \	✓ SF CA ✓ Value of/Waarde van p CA	(2)	3E
				<b>[13]</b>

<b>QUESTION/VRAAG 2</b>				
2.1	2.1.1	$x^2 + y^2 = r^2$ $(-3)^2 + (4)^2 = r^2$ $25 = r^2$ $y = +\sqrt{25 - x^2}$	✓ SF A ✓ $25 = r^2$ A ✓ Equation/Vergelyking CA  <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO 3</div>	(3) 2E
	2.1.2	$m_{OA} = \frac{4}{-3}$	$\checkmark -\frac{4}{3}$ A	(1) 1D
	2.1.3	$m_{EF} = \frac{3}{4}$	✓ Answer/Antwoord CA	(1) 2E



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<b>QUESTION/VRAAG 3</b>					
3.1		$\cos \text{ec } \hat{F} \times \tan \hat{N}$ $\frac{1}{\sin(60^\circ)} \times \tan(100^\circ)$ $= -6,55$	✓ Subst. A ✓ Answer/Antwoord A <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO 2</div>	(2)	1D
3.2	3.2.1	$x = \sqrt{(10)^2 - (-6)^2}$ $x = 8$	✓ M A ✓ Answer/Antwoord CA <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO 2</div>	(2)	1D
	3.2.2	$2 \sin \beta + \cos \beta$ $= 2 \left( -\frac{6}{10} \right) + \frac{8}{10}$ $= \left( -\frac{12}{10} \right) + \frac{8}{10}$ $= -\frac{4}{10}$ $= -\frac{2}{5}$	✓ $-\frac{6}{10}$ CA ✓ $\frac{8}{10}$ CA  ✓ Answer/Antwoord A <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO <math>\frac{1}{3}</math></div>	(3)	3E



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3.3	$\cot x = -0,5$ Ref. angle/ <i>Verw. hoek</i> $\frac{1}{\tan x} = -0,5$ $\tan x = -2$ $= 63,4349^\circ$  <b>In quadrant/<i>kwadrant</i> 2:</b> $x = 180^\circ - 63,4349^\circ$ $x = 116,57^\circ$  <b>In quadrant/<i>kwadrant</i> 4:</b> $x = 360^\circ - 63,4349^\circ$ $x = 296,57^\circ$	$\checkmark \frac{1}{\tan x} = -0,5$  $\checkmark$ Ref. angle/ <i>verw. hoek</i>  $\checkmark x = 116,57^\circ$  $\checkmark x = 296,57^\circ$	A  A  CA  CA	(4)	4E
					[11]

<b>QUESTION/VRAAG 4</b>						
4.1	4.1.1	$\sin(180^\circ + x)$ $= -\sin x$	$\checkmark$ Answer/ <i>Antwoord</i>	A	(1)	1E
	4.1.2	$\sec^2(\pi - x)$ $= +\sec^2 x$ or/of $\frac{1}{+\cos^2 x}$	$\checkmark$ Answer/ <i>Antwoord</i>	A	(1)	2M

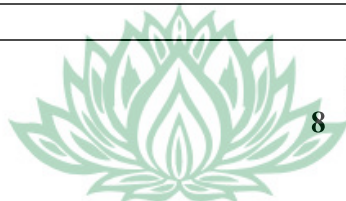


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4.1.3	$\frac{\sin(180^\circ + x) \cdot \cos(2\pi + x) \cdot \sec^2(\pi - x)}{\cot(360^\circ - x) \cdot \sin 150^\circ}$ $= \frac{(-\sin x) \cdot (\cos x) \cdot \left(\frac{1}{\cos^2 x}\right)}{\left(-\frac{1}{\tan x}\right) \cdot \left(\frac{1}{2}\right)}$ $= \frac{-\sin x}{\cos x} \cdot \frac{1}{-\frac{1}{2 \tan x}}$ $= -\tan x \times -2 \tan x$ $= 2 \tan^2 x$	<p>✓ <math>\cos x</math> A</p> <p>✓ <math>\left(\frac{1}{2}\right)</math> A</p> <p>✓ <math>-\frac{1}{\tan x}</math> A</p> <p>✓ S CA</p> <p>✓ <math>-\tan x</math> CA</p> <p>✓ Answer/Antwoord CA</p>	(6)	3E
4.2	$\sin^2 x$	✓ Answer/Antwoord A	(1)	1E
4.3	$\frac{10 \cot x \cdot (1 - \cos^2 x) \cdot (1 + \tan^2 x)}{\tan x} = 10$ $\text{LH} = \frac{10 \frac{\cos x}{\sin x} \cdot (\sin^2 x) \cdot (\sec^2 x)}{\tan x}$ $= \frac{10 \cos x \cdot \sin x \cdot \frac{1}{\cos^2 x}}{\tan x}$ $= \frac{10 \sin x}{\cos x} \cdot \frac{1}{\tan x}$ $= \frac{10 \sin x}{\cos x} \div \frac{\sin x}{\cos x}$ $= \frac{10 \sin x}{\cos x} \times \frac{\cos x}{\sin x}$ $= 10$ $= \text{RHS/RK}$	<p>✓ <math>\frac{\cos x}{\sin x}</math> A</p> <p>✓ <math>\sec^2 x</math> A</p> <p>CA</p> <p>✓ S</p> <p>✓ <math>\frac{\sin x}{\cos x}</math> A</p> <p>✓ <math>\frac{10 \sin x}{\cos x} \times \frac{\cos x}{\sin x}</math> CA</p>	(5)	3D
				<b>[14]</b>



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<b>QUESTION/VRAAG 5</b>					
5.1	5.1.1	Amplitude = 1	✓ Answer/Antwoord	A	(1) 1E
	5.1.2	Period/Periode = $360^\circ$	✓ Answer/Antwoord	A	(1) 1E
5.2	$h(x) = \sin(x + 30^\circ)$ $h(x) = \sin(x + 30^\circ - 30^\circ)$ $f(x) = \sin x$		✓ Answer/Antwoord	A	(1) 2D
5.3	$h(x)$ : ✓ intercepts/afsnitte ✓ shape/vorm ✓ end points/eindpunte $g(x)$ : ✓ intercepts/afsnitte ✓ shape/vorm ✓ turning point/draaipunt			A A A A A A	(6) 2M
5.4	$x \in (60^\circ; 240^\circ)$		✓ Notation/Notasie ✓ Endpoints/Eindpunte	CA CA	(2) 4E
					<b>[11]</b>

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<b>QUESTION/VRAAG 6</b>				
6.1	$AB = \sqrt{(5)^2 + (12)^2}$ $= 13 \text{ m}$ <b>OR/OF</b> $\sin 30^\circ = \frac{t}{s}$ $\sin 30^\circ = \frac{12}{s}$ $s = 24$ <b>OR/OF</b> $\cos 30^\circ = \frac{5}{s}$ $s = 5,77 \text{ m}$	✓ SF ✓ 13 m <b>OR/OF</b> 24 m <b>OR/OF</b> 5,77m	A CA	1M
				(2)
6.2	$\widehat{CTD} = 180^\circ - 90^\circ - 65^\circ = 25^\circ$	✓ 25°	A	(1) 1E
6.3	6.3.1 $\frac{CD}{\sin \widehat{CTD}} = \frac{TC}{\sin \widehat{CDT}}$  <b>OR/OF</b> $\frac{5}{\sin 25^\circ} = \frac{TC}{\sin 110^\circ}$	✓ Answer/Antwoord	CA	1M
				(1)
	6.3.2 $\frac{5}{\sin 25^\circ} = \frac{TC}{\sin 110^\circ}$  $\frac{5 \times \sin 110^\circ}{\sin 25^\circ} = TC$  $TC = 11,12 \text{ m}$	✓ SF  ✓ Answer/Antwoord	CA CA	2M
				(2)
6.4	$a^2 = b^2 + c^2 - 2bc \cos A$ $BC^2$ $= 12^2 + 11,12^2 - 2(11,12)(12) \cos 65^\circ$ $BC^2 = 154,8660383$ $BC = 12,44 \text{ m}$	✓ F  ✓ SF  ✓ Answer/Antwoord	A CA CA	2D
				(3)





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<b>QUESTION/VRAAG 7</b>					
7.1		90° or right angle	✓ R	A	(1) 1E
7.2	7.2.1	Radius = 15 cm	✓ ST	A	(1) 1E
	7.2.2	∠s in semicircle/∠e in halfsirkel <b>OR/OF</b> diameter subtends right angle/middel lyn onderspan regte hoek	✓ R	A	(1) 1E
	7.2.3	$\hat{M}_3 = 55^\circ$ [∠s opp equal sides]/[∠e teenoor gelyke sye] $\hat{L}_1 = 55^\circ$ [tan chord theorem] [Raaklyn-koord st.]	✓ ST ✓ RE  ✓ ST ✓ RE	A A A A	(4) 2E
					<b>[7]</b>

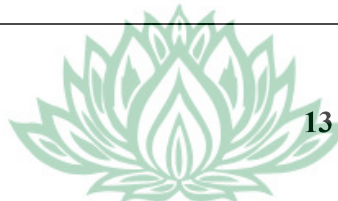
<b>QUESTION/VRAAG 8</b>					
8.1		Interior opposite angle/Teenoorstaande binnehoek	✓ R	A	(1) 1E
8.2	8.2.1 (a)	$\hat{B}_2 = 66^\circ$ [∠s in the same seg./∠e in dies. O segm.]	✓ ST ✓ RE	A A	(2) 1M
	8.2.1 (b)	$\hat{C}_1 = 30^\circ$ [∠s in the same seg./∠e in dies. O segm.]	✓ ST ✓ RE	A A	(2) 1M
	8.2.1 (c)	$\hat{YDC} = 30^\circ + 66^\circ = 96^\circ$ [ext ∠ of a cycl quad/buite ∠ van kvh]	✓ ST ✓ RE	CA A	(2) 2M
8.3	8.3.1	$AT = TB$ [Tans from common pt <b>OR</b> Tans from same pt/ Raaklyne vanuit dies. punt] $\therefore \hat{A}_3 = \hat{B}_4$ [∠s opp equal sides/∠e teenoor gelyke sye] $\hat{A}_3 + \hat{B}_4 = 180^\circ - 75^\circ$ (∠ sum in Δ/∠e van Δ) $\therefore \hat{B}_4 = \frac{180^\circ - 75^\circ}{2}$ $\therefore \hat{B}_4 = 52,5^\circ$	✓ ST/RE ✓ ST/RE ✓ ST ✓ RE	A A A A	(4) 3D
	8.3.2 (a)	$\hat{C} = 52,5^\circ$ [tan-chord theorem/ raaklyn - koord st]	✓ RE ✓ ST	A CA	(2) 2E



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8.3.2 (b)	$\widehat{O}_1 = 105^\circ$ [ $\angle$ at centre = $2 \times \angle$ at circum./Midpts $\angle = 2 \times$ <i>Omtreks <math>\angle</math></i> ]	✓ RE ✓ ST	A CA	(2)	1D
8.3.2 (c)	$AO = OB$ (= radii) $\therefore \widehat{A}_2 = \widehat{B}_3$ [ $\angle$ s opp equal side/ $\angle$ teenoor gelyke sye] $\widehat{A}_2 + \widehat{B}_3 = 180^\circ - 105^\circ$ ( $\angle$ sum in $\Delta$ / $\angle$ van $\Delta$ ) $\therefore \widehat{A}_2 = \frac{180^\circ - 105^\circ}{2}$ $\therefore \widehat{A}_2 = 37,5^\circ$	✓ ST/RE ✓ ST/RE ✓ ST	A A CA	(3)	2D
<b>[18]</b>					

<b>QUESTION/VRAAG 9</b>					
9.1	Proportionally/Eweredig	✓ R	A	(1)	1M
9.2	9.2.1 $\Delta EMA$ and $\Delta FMB$ : $E\widehat{M}A = F\widehat{M}B$ ; [given/gegee] $E\widehat{A}M = F\widehat{B}M = 90^\circ$ $A\widehat{E}M = M\widehat{F}B$ [Int $\angle$ s $\Delta$ / $\angle$ van $\Delta$ ] $\therefore \Delta AEF \parallel \Delta CMB$ ; $\angle \angle \angle$ , HHH	Do not mark		(0)	3E
	9.2.2 $AM = 120 \text{ cm} = 1,2 \text{ m}$ $MB = 4,5 \text{ m}$ $EA = 160 \text{ cm} = 1,6 \text{ m}$ $\frac{MB}{MA} = \frac{FB}{AE}$ $\frac{4,5}{1,2} = \frac{FB}{1,6}$ [line $\parallel$ one side of $\Delta$ /lyn $\parallel$ een sy van $\Delta$ ] $1,2 \times FB = 4,5 \times 1,6$ $FB = \frac{4,5 \times 1,6}{1,2}$ $FB = 6 \text{ m}$	✓ Conversion to metres/cm Omskakeling na meter/cm 1,6 m & 1,2 m or 450cm ✓ ST ✓ RE ✓ Answer/ Antwoord	A CA A CA	(4)	3E
9.3	Equal to half the length of the third side Gelyk aan die helfte van die derde sy.	✓ RE	A	(1)	1M



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9.4	9.4.1	Yes/ <i>Ja</i> [Midpt Theorem/ <i>Midpt.-stelling</i> ]	✓ ST ✓ RE	A A	(2)	4E
	9.4.2	$DE = \frac{1}{2}BC$ [Midpt Theorem/ <i>Midpt.-stelling</i> ] $\therefore \widehat{AED} = 64^\circ$ [corresp $\angle$ s; $DE \parallel BC$ / ooreenk. $\angle^\circ$ ; $DE \parallel BC$ ]	✓ Answer/ <i>Antwoord</i>	CA	(1)	1D
	9.4.3	$2y + 1 = \frac{1}{2}(22)$ $y = 5$ $\therefore DE = 11 \text{ cm}$	✓ value of y/ <i>waarde van y</i> ✓ length of DE/ <i>lengte van DE</i>	CA	(2)	2D
						<b>[14]</b>



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QUESTION/VRAAG 10					
10.1	10.1.1	$n = \frac{4500}{60}$ $n = 75 \text{ r/s}$	✓ Answer/Antwoord A	(1)	1E
	10.1.2	$\omega = 2\pi n$ $= 2\pi(75)$ $= 150\pi / 471,24 \text{ rad/s}$	✓ F A ✓ SF A ✓ Answer/Antwoord CA	(3)	2E
	10.1.3	$4h^2 - 4dh + x^2 = 0$ $4(115)^2 - 4(460)(115) + x^2 = 0$ $-158700 + x^2 = 0$ $x^2 = 158700$ $x = \sqrt{158700}$ $x = 398,37$ <p><b>OR/OF</b></p> $D = h + \frac{x^2}{4h}$ $460 = 115 + \frac{x^2}{4(115)}$ $x^2 = 158700$ $x = \sqrt{158700}$ $x = 398,37$	✓ F A ✓ SF A ✓ S CA ✓ Value/Waarde CA	(4)	2D
10.2	10.2.1	$110^\circ \times \frac{\pi}{180} = \frac{11}{18}\pi \text{ or/of } 1,92\text{rad}$	✓ Answer/Antwoord A	(1)	1E
	10.2.2	$A = \frac{1}{2}r^2\theta$ $A = \frac{1}{2}(130)^2\left(\frac{11}{18}\pi\right)$ $A = \frac{46475}{9}\pi \text{ mm}^2 / 16223 \text{ mm}^2$	✓ F A ✓ SF CA ✓ Answer/Antwoord CA	(3)	2D





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	10.2.3	$\text{Area of } \Delta BOC = \frac{1}{2}(OB)(OC)\sin\hat{O}$ $= \frac{1}{2}(130)(130)\sin(110^\circ)$ $= 7940,40 \text{ mm}^2$ $\text{Area of/van segment} = 16\,222,84 - 7\,940,40$ $= 8\,282,44 \text{ mm}^2$	✓ F A ✓ SF A ✓ area of $\Delta$ <i>Oppervlakte van <math>\Delta</math></i> CA  ✓ M A ✓ Answer/Antwoord CA	(5)	3D
					[17]

<b>QUESTION/VRAAG II</b>					
11.1	11.1.1	$\frac{170}{100} = 1,7 \text{ m}$	✓ Answer/Antwoord A	(1)	1E
	11.1.2	$A = a(m_1 + m_2 + m_3 + m_4)$ $= 1,5 \left( \frac{1,6+1,4}{2} + \frac{1,4+0,85}{2} + \frac{0,85+1,7}{2} + \frac{1,7+1,8}{2} \right)$ $= \frac{339}{40} / 8,48 \text{ m}^2$ OR/OF $A = a \left( \frac{O_1+O_n}{2} + O_2 + O_3 + \dots + O_{n-1} \right)$ $= 1,5 \left( \frac{1,6+1,8}{2} + 1,4 + 0,85 + 1,7 \right)$ $= 8,48 \text{ m}^2$	✓ F A ✓ $a = 1,5$ A ✓ SF CA ✓ Answer/Antwoord CA  ✓ F A ✓ $a = 1,5$ A ✓ SF CA ✓ Answer/Antwoord CA	(4)	2D
	11.1.3	$A = (\ell \times b) - (\text{area of irregular/opp van onreëlmatige})$ $= (6 \times 1,8) - (8,48)$ $= 2,32 \text{ m}^2$	✓ F A ✓ SF A ✓ Answer/Antwoord CA	(3)	3E



<b>MARKING GUIDELINES/ NASIENRIGLYNE</b>	<b>TECHNICAL MATHEMATICS/TEGNIESE WISKUNDE (PAPER/VRAESTEL 2)</b>	<b>GR12 0624</b>
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11.2	11.2.1	<p>There are 4 people in Mrs Saaiman's household.</p> <p><i>Daar is 4 mense in Mev. Saaiman se huishouding.</i></p> <p>Area of solar panels/Opp van sonpaneel</p> $4 + (2 \times 0,8) = 5,6 \text{ m}^2$ <p><i>Area = l × b</i></p> $5,6 = l \times 2$ $l = \frac{5,6}{2}$ $l = 2,8 \text{ m}$	<p>✓ area/opp 5,6 m<sup>2</sup> CA</p> <p>✓ F A</p> <p>✓ SF CA</p> <p>✓ Answer/Antwoord CA (4)</p>	2D
11.2	11.2.2	<p><math>1l = 1000 \text{ cm}^3</math></p> <p><math>200 l = 200\,000 \text{ cm}^3</math></p> <p><math>h = 2 \text{ m} = 200 \text{ cm}</math></p> <p><math>V = \pi r^2 h</math></p> <p><math>200\,000 = \pi r^2 (200)</math></p> <p><math>\frac{200\,000}{\pi(200)} = r^2</math></p> $r = \sqrt{\frac{200\,000}{\pi(200)}}$ <p><math>r = 17,84 \text{ cm}</math></p> <p><math>r \approx 18 \text{ cm}</math></p>	<p>✓ conversion/herlei 200 000 cm<sup>3</sup> A</p> <p>✓ conversion/herlei 200 cm A</p> <p>✓ F A</p> <p>✓ make r the subject/ <i>maak r die onderwerp</i> A</p> <p>✓ SF CA</p> <p>✓ Answer/Antwoord CA (6)</p>	2D
				<b>[18]</b>

<b>TOTAL/TOTAAL:</b>			<b>147</b>
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**PLEASE REFER TO THE ADDENDUM ON THE NEXT PAGE, WHICH APPLIES ONLY TO THE AFRIKAANS VERSION OF THE MARKING GUIDELINES FOR QUESTION 11.1 ONLY.**

