



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**SENIOR CERTIFICATE/SENIOR SERTIFIKAAT
NATIONAL SENIOR CERTIFICATE/
NASIONALE SENIOR SERTIFIKAAT**

GRADE/GRAAD 12

**MATHEMATICAL LITERACY P2/
WISKUNDIGE GELETTERDHEID V2**

NOVEMBER 2020

MARKING GUIDELINES/NASIENRIGLYNE

MARKS/PUNTE: 150

Symbol/Kode	Explanation/Verduideliking
M	Method/Metode
MA	Method with accuracy/Metode met akkuraatheid
CA	Consistent accuracy/Volgehoueakkuraatheid
A	Accuracy/Akkuraatheid
C	Conversion/Herleiding
S	Simplification/Vereenvoudiging
RT	Reading from a table/a graph/document/diagram/Lees vanaf tabel/grafiek/diagram
SF	Correct substitution in a formula/Korrektevervanging in formule
O	Opinion/Explanation/Opinie/Verduideliking
P	Penalty, e.g. for no units, incorrect rounding off, etc./Penalisasie, bv. virgeeneenhede/verkeerde afronding, ens.
R	Rounding off/Afronding
NPR	No penalty for rounding/Geenpenalisasievirafrondingnie
AO	Answer only/Slegsantwoord
MCA	Method with consistent accuracy/Metode met volgehoueakkuraatheid


**These marking guidelines consist of 22 pages.
Hierdienasienriglyne bestaan uit 22 bladsye.**


NOTE:

- If a candidate answers a question TWICE, mark only 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 provided at least one of the values is correct; however it stops at the second calculation error.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.

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 op voorwaarde dat ten minste een van die waardes korrek is, dithou op by die tweede berekeningsfout.
- Wanneer 'n kandidaat aflesings vanaf 'n grafiek, tabel, uitlegplan en kaart geneem en ekstra antwoorde gee, penaliseer vir elke ekstra item.


QUESTION/VRAAG1 [39 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.1	Slovakia/Slowakye (diff. 2015 -16): $\begin{array}{r} \checkmark \text{RT} \\ 163\,740 - 161\,906 \\ \hline = 1\,834 \end{array} \quad \checkmark \text{MA} \quad \checkmark \text{CA}$	 1 RT correct values 1 MA method of subtraction 1 CA answer (3)	D L2
1.1.2	Range = highest – lowest Omvang = hoogste – kleinste $\begin{array}{r} \checkmark \text{RT} \\ 2\,947\,664 = 2\,970\,436 - N \\ \hline N = 22\,772 \end{array} \quad \checkmark \text{M} \quad \checkmark \text{CA}$	1M Range concept 1RT highest value 1CA simplification AO (3)	D L2
1.1.3	$\begin{array}{r} \checkmark \text{O} \quad \checkmark \text{O} \\ \text{Number of learners enrolled decreased from 2014/2015/2016} \\ \text{OR The number of learners decreased every year} \\ \text{Getal ingeskrewe leerders in Griekeland neem vanaf} \\ \text{2014/2015/2016 af} \\ \text{OF Die getal leerder neem jaarliks af} \end{array}$	1O decrease 1O time (2)	D L4


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.4	<p>% increase(Turkey)/% <i>verhoging</i> (Turkye)</p> $= \frac{1\,221\,165 - 1\,064\,190}{1\,064\,190} \times 100\%$ <p style="text-align: right;">✓M</p> $= \frac{156\,975}{1\,064\,190} \times 100\%$ <p>= 14,75 % ✓CA</p> <p>% increase(United Kingdom) /% <i>verhoging</i> (Verenigde Koninkryk)</p> $= \frac{2\,248\,162 - 1\,596\,803}{1\,596\,803} \times 100\%$ <p style="text-align: right;">✓MA</p> <p>= 40,79 % ✓CA</p> <p>United Kingdom has the biggest percentage increase/Verenigde Koninkryk het die grootste persentasie <i>verhoging</i>. ✓CA</p> <p style="text-align: center;">OR/OF</p> <div style="text-align: center;">  </div> <p>Turkey: $(1\,221\,165 \div 1\,064\,190) \times 100\%$ ✓MA</p> <p>= 114,75%</p> <p>% increase (Turkey) = 114,75% - 100% ✓M</p> <p style="text-align: right;">= 14,75% ✓CA</p> <p style="text-align: right;">✓MA</p> <p>(United Kingdom): $(2\,248\,162 \div 1\,596\,803) \times 100\%$</p> <p>= 140,79%</p> <p>% increase United Kingdom = 140,79% - 100%</p> <p style="text-align: right;">= 40,79% ✓CA</p> <p>United Kingdom has the biggest percentage increase/Verenigde Koninkryk het die grootste persentasie <i>verhoging</i>. ✓CA</p>	<p>1M using correct formula 1MA subtracting correct values</p> <p>1CA simplification</p> <p>1MA subtracting correct values</p> <p>1CA simplification as a percentage 1CA county</p> <p style="text-align: center;">OR/OF</p> <p>1MA subtracting correct values</p> <p>1M using correct formula 1CA simplification</p> <p>1MA subtracting correct values</p> <p>1CA simplification as a percentage 1CA county NPR</p> <p style="text-align: right;">(6)</p>	<p>D L3</p>
1.1.5	<p>Probability (decline 2015-2016) /<i>Waarskynlikheid</i></p> $= \frac{3}{11}$ <p style="text-align: right;">✓A</p> <p style="text-align: right;">✓A</p> <p>≈ 0,27 ✓CA</p>	<p>1A numerator 1A denominator</p> <p>1CA as decimal NPR</p> <p style="text-align: right;">(3)</p>	<p>P L3</p>

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.1.6	<p>Denmark cost/Denemark koste $= €520,83 \times 284\ 655$ ✓RT $= €148\ 256\ 863,70$ ✓A</p> <p>Slovenia cost /Slovenië koste $= €350 \times 85\ 407 = €29\ 892\ 450$ ✓A</p> <p>$€148\ 256\ 863,70 : €29\ 892\ 450$ $4,959... : 1$ ✓CA</p> <p>✓O The statement is NOT VALID/Bewering is NIE GELDIG NIE</p> <p style="text-align: center;">OR/OF</p> <p>Accept per year or per month /Aanvaar per jaar of per maand</p> <p>2016 Denmark : 2016 Slovenia $284\ 655 \times 520,83 \times 12 : 85\ 407 \times 350 \times 12$ $1\ 779\ 082\ 364 : 358\ 709\ 400$ $4,959... : 1$ ✓CA</p> <p>✓O The statement is NOT VALID/Bewering is NIE GELDIG NIE</p> <p style="text-align: center;">OR/OF</p> <p>Denmark: $€ 520,83 \times 12 = € 6\ 249,96$ per year /per jaar $€ 6\ 249,96 \times 284\ 655$ ✓RT $= € 1\ 779\ 082\ 364$ ✓A</p> <p>Slovenia : $€ 350 \times 12 = € 4\ 200$ per year /per jaar $€ 4\ 200 \times 85\ 407$ ✓RT $= € 358\ 709\ 400$ ✓A</p> <p>Denmark: Slovenia $€ 1\ 779\ 082\ 364 : € 358\ 709\ 400$ $(€ 1\ 779\ 082\ 364 \div € 358\ 709\ 400) : (€ 358\ 709\ 400 \div € 358\ 709\ 400)$ ✓CA $= 4,9596 : 1$</p> <p>The statement is NOT VALID ✓O</p>	<p>1RT correct values 1A cost</p> <p>1RT correct values 1A cost</p> <p>1CA simplified ratio in correct order</p> <p>1O verification</p> <p style="text-align: center;">OR/OF</p> <p>1RT Denmark values 1RT Slovenia values 1A cost 1A cost 1CA simplified ratio in correct order</p> <p>1O verification</p> <p style="text-align: center;">OR/OF</p> <p>1RT correct values 1A cost</p> <p>1RT correct values 1A cost</p> <p>1CA simplified ratio in correct order</p> <p>1O verification NPR</p>	<p>D L4</p> <p style="text-align: right;">(6)</p>


Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
1.2.1	<p>Profit/Wins = R30 × 120% = R36 ✓MA</p> <p>Profit per marble / Wins per albaster = $\frac{R36}{100} = R0,36$ ✓CA</p> <p>Cost price per marble/Kosprys per albaster = $\frac{R30}{100} = R0,30$ ✓A</p> <p>Selling price/Verkoopprys = R0,36 + R0,30 = R0,66 per marble/albaster ✓MCA</p> <p style="text-align: center;">OR/OF</p> <p>R30 per 100 marbles/albasters is 100% ✓MA Profit on 100 marbles to yield 120% per pack Wins op 100 albasters om 120% per pakte gee = $\frac{R30 \times 120\%}{100\%}$ = R36 per pack</p> <p>Price of selling 1 marble is/Verkoopprys per albaster is: $\frac{R30 + R36}{100}$ ✓MCA ✓M = R0,66 ✓CA</p> <p style="text-align: center;">OR/OF</p> <p>Selling price/verkoopprys = R30 × 220% = R66 ✓MA ✓MCA Price per marble/Prys per albaster = $\frac{R66}{100} = R0,66$ ✓M ✓CA</p> <p style="text-align: center;">OR/OF</p> <p>Price per marble/Prys per albaster = $\frac{30}{100} = R0,30$ ✓MA</p> <p>Selling price/verkoopprys = $0,3 \times 2,2 = R0,66$ ✓M ✓MCA ✓CA</p> <p style="text-align: center;">OR/OF</p> <p>Selling price /verkoopprys = $30 \times 2,2 = R66$ ✓MA ✓MCA</p> <p>Price per marble/Prys per albaster = $\frac{66}{100}$ ✓M ✓CA = R0,66</p>	<p>1MA calculating profit</p> <p>1CA profit per marble</p> <p>1A price per marble</p> <p>1MCA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA calculating profit</p> <p>1MCA cost plus profit 1M dividing by 100</p> <p>1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA calculating % increase 1MCA selling price 1M dividing by 100 1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA dividing by 100</p> <p>1M calculating % increase 1MCA selling price 1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA calculating % increase 1MCA selling price 1M dividing by 100 1CA simplification NPR</p>	<p>F L3</p> <p style="text-align: right;">(4)</p>



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.2.2	<p>Radius container/houer = $\frac{6,4}{2}$ ✓C = 3,2 cm ✓MCA</p> <p>Volume of a cylinder/ <i>Volume van 'n silinder</i> = $\pi \times \text{radius}^2 \times \text{height}$ ✓SF = $3,142 \times (3,2 \text{ cm})^2 \times 30 \text{ cm}$ = $965,2224 \text{ cm}^3$ ✓CA</p> <p>Volume of 2 bags of marbles/<i>volume van 2 sakkealbasters</i> = $2 \times 2 \text{ cm}^3 \times 100$ ✓MA = 400 cm^3 ✓CA</p> <p>Vol. Water to fill container/<i>Vol. water om houertevul</i> = $965,2224 \text{ cm}^3 - 400 \text{ cm}^3$ ✓MCA = $565,2224 \text{ cm}^3$ ✓CA $\frac{1}{2} \ell = 500 \text{ cm}^3$</p> <p>Statement is valid/<i>Bewering is geldig</i> ✓O</p> <p style="text-align: center;">OR/OF  OR/OF</p> <p>Radius of container/houer = $\frac{6,4}{2} = 3,2 \text{ cm}$ ✓C ✓MCA</p> <p>Volume of a cylinder/ <i>Volume van 'n silinder</i> ✓SF = $\pi \times \text{radius}^2 \times \text{height} = 3,142 \times 3,2 \text{ cm} \times 3,2 \text{ cm} \times 30 \text{ cm}$ = $965,2224 \text{ cm}^3$ OR/OF $0,9652224 \text{ litres}$ ✓CA</p> <p>Volume of 2 bags of marbles/<i>volume van 2 sakke albasters</i> = $2 \times 2 \text{ cm}^3 \times 100$ ✓MA = 400 cm^3 OR/OF $0,4 \text{ litres}$ ✓CA</p> <p>Vol. Water to fill container/<i>Vol. water om houertevul</i> = $965,2224 \text{ cm}^3 - 400 \text{ cm}^3$ ✓MCA = $565,2224 \text{ cm}^3$ ✓CA OR/OF = $0,9652224 \ell - 0,4 \ell = 0,5652224 \ell$ More than $0,5 \ell$ VALID / <i>meer as $0,5 \ell$ GELDIG</i> ✓O</p>	<p>1C conversion</p> <p>1MCA finding the radius</p> <p>1SF both radius and height</p> <p>1CA simplification</p> <p>1MA Vol. of total marbles</p> <p>1CA simplification</p> <p>1MCA subtraction</p> <p>1CA simplification</p> <p>1O conclusion</p> <p style="text-align: center;">OR/OF</p> <p>1C conversion</p> <p>1MCA finding the radius</p> <p>1SF both radius and height</p> <p>1CA simplification</p> <p>1MA Vol. of total marbles</p> <p>1CA simplification</p> <p>1MCA subtraction of volumes</p> <p>1CA simplification</p> <p>1O conclusion</p>	<p>M L4</p>

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
	<p style="text-align: center;">OR/OF</p> <p>Radius of container/houer = $\frac{6,4}{2} = 3,2$ cm ✓C ✓MCA</p> <p>Volume of a cylinder/ <i>Volume van 'n silinder</i> $= \pi \times \text{radius}^2 \times \text{height}$ $= 3,142 \times 3,2 \text{ cm} \times 3,2 \text{ cm} \times 30 \text{ cm}$ ✓SF $= 965,2224 \text{ cm}^3$ OR/ OF 0,9652224 litres ✓CA</p> <p>Volume of 2 bags of marbles/<i>volume van 2 sakke albasters</i> = $2 \times 2 \text{ cm}^3 \times 100$ ✓MA ✓CA $= 400 \text{ cm}^3$ OR/OF 0,4 litres</p> <p>$400 \text{ cm}^3 + 500 \text{ cm}^3 = 900 \text{ cm}^3$ ✓MCA ✓CA</p> <p>This is less than $965,2224 \text{ cm}^3$ of the cylinder , VALID ✓O <i>Minder as $965,2224 \text{ cm}^3$ van die silinder, GELDIG</i></p>	<p style="text-align: center;">OR/OF</p> <p>1C conversion 1MCA finding the radius</p> <p>1SF both radius and height 1CA simplification</p> <p>1MA Vol. of total marbles 1CA simplification</p> <p>1MCA addition 1CA simplification</p> <p>1O conclusion</p> <p style="text-align: right;">(9)</p>	
1.2.3	<p style="text-align: center;"></p> <p>Outer diameter/<i>Buitemiddellyn</i> $= 64 \text{ mm} + 2 \times 0,5 \text{ mm} = 65 \text{ mm}$ ✓ MA</p> <p>Circumference = $\pi \times \text{diameter}$ / <i>Omtrek = $\pi \times \text{middellyn}$</i> $= 3,142 \times (6,5) \text{ cm}$ ✓ SF $= 20,423 \text{ cm}$ ✓CA</p> <p style="text-align: center;">OR/OF</p> <p>Radius = $32 \text{ mm} + 0,5 \text{ mm} = 32,5 \text{ mm}$ ✓ MA $= 3,25 \text{ cm}$</p> <p>Circumference/<i>omtrek</i> = $2 \times \pi \times \text{radius}$ $= 2 \times 3,142 \times 3,25 \text{ cm}$ ✓ SF $= 20,423 \text{ cm}$ ✓ CA</p>	<p>1MA increased diameter</p> <p>1SF substitution 1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MA increased radius</p> <p>1SF substitution 1CA simplification NPR</p> <p style="text-align: right;">(3)</p>	M L2
		[39]	

QUESTION/VRAAG2 [38 MARKS/PUNTE]			
Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.1	$\text{Total/Totaal} = 2 \times (79 \times R244,35)$ $= R38\ 607,30$ <p style="text-align: center;">OR/OF</p> <p>Amount claimed per person/Bedrag geëis per persoon:</p> $\text{CM/HM} = 79 \times R244,35 = R19\ 303,65$ $\text{IM} = 79 \times R244,35 = R19\ 303,65$ $\text{Total/Totaal} = R19\ 303,65 + R19\ 303,65$ $= R38\ 607,30$	<p>1A number of personnel 1A tariff 1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1A CM amount 1A IM amount</p> <p>1CA simplification</p> <p style="text-align: right;">(3)</p>	F L2
2.1.2	<p>A (Hours worked by SM)/A(Ure gewerk deur SM)</p> $= \frac{R13\ 763,75}{R211,75/h}$ $= 65 \text{ hours/ure}$	<p>1MA numerator and denominator 1CA simplification</p> <p style="text-align: right;">(2)</p>	M L2
2.1.3 (a)	<p>Number of marking hours/Getalnasienure</p> $= \frac{2\ 808 \times 28}{23 \times 60}$ $= 56,97391303 \text{ hours/ure} \approx 57 \text{ hours/ure}$ <p>1st day (Monday/Maandag): 14:00 to 20:00 = 5 hours/ure</p> <p>Tuesday to Saturday/Dinsdag tot Saterdag: 50 hours/ure</p> <p>Sunday/Sondag = 2 hours/ure</p> $\text{Total/Totaal } 5 + 50 + 2 = 57 \text{ hrs./ure}$ <p>Finish at 10:00 on Sunday. Eindig Sondag om 10:00</p> <p style="text-align: center;">OR/OF</p> <p>Number of marking hours/ Getal nasien ure</p> $= \frac{2\ 808 \times 28}{23 \times 60} = 56,97391303 \text{ hours} \approx 57 \text{ hours}$ <p>Actual marking time per day/ Werklike merkyd per dag = 12 hrs – 2 hrs = 10 hrs</p> <p>Start/Begin</p> <p>Mon + Tue + Wed + Thu + Fri + Sat + Sun</p> $= 5h + 10h + 10h + 10h + 10h + 10h + 2h$ $= 57 \text{ hours/ure}$ <p>Sunday/Sondag = 08:00 + 2h = 10:00</p>	<p>1SF correct numerator 1SF correct denominator 1CA simplification/hours</p> <p>1A hours of 1st day</p> <p>1A hours of complete days to last day</p> <p>1CA day& time</p> <p style="text-align: center;">OR/OF</p> <p>1SF correct numerator 1SF correct denominator 1CA simplification/hours</p> <p>1A hours of 1st day</p> <p>1A hours of complete days to last day 1CA day and time</p>	M L3

Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
	<p style="text-align: center;">OR/OF</p> <p>Number of marking hours/ <i>Getal nasien ure</i> $= \frac{2\,808 \times 28}{23 \times 60} \quad \checkmark \text{SF}$ $= 56,97391303 \text{ hours/ure} \approx 57 \text{ hours/ure} \quad \checkmark \text{CA}$ <p>57 hours: Monday/<i>Maandag</i> = 5 hrs/<i>uur</i> $\checkmark \text{A}$ Rest of the days/<i>Res van die dae</i> = 57 hrs – 5 hrs = 52 hrs/<i>uur</i> Full marking days/<i>Vol merk dae</i> = $\frac{52}{10}$ = 5,2 days/<i>dae</i> Therefore/<i>dus</i> 5 days + 0,2 days 5 days Tuesday to Saturday / 5 <i>dae</i> is <i>Dinsdag tot Saterdag</i> 0,2 days/<i>dae</i> × 10 = 2 hrs for Sunday/<i>uur vir Sondag</i> $\checkmark \text{A}$ Ends / <i>eindig</i> Sunday/<i>Sondag</i> 10:00 $\checkmark \text{CA}$</p> <p style="text-align: center;">OR/OF</p> <p>Number of marking hours/ <i>Getal nasien ure</i> $= \frac{2\,808 \times 28}{23 \times 60} \quad \checkmark \text{SF}$ $\approx 57 \text{ hours/uur} \quad \checkmark \text{CA}$ </p> <p>14:00 to 14:00 = 10 working hours /<i>werks ure</i> $\checkmark \text{A}$ Monday 14:00 to Saturday 14:00 = 50 hours <i>Maandag 14:00 tot Saterdag 14:00 = 50 uur</i></p> <p>Saturday 14:00 to Sunday 10:00 = 7 hours <i>Saterdag 14:00 tot Sondag 10:00 = 7 uur</i> $\checkmark \text{A}$</p> <p>Finish at 10:00 on Sunday $\checkmark \text{CA}$ <i>Eindig Sondag 10:00</i></p> </p>	<p style="text-align: center;">OR/OF</p> <p>1SF correct numerator 1SF correct denominator 1CA simplification/hours 1A hours of 1st day 1A hours of complete days to last day 1CA day & time</p> <p style="text-align: center;">OR/OF</p> <p>1SF correct numerator 1SF correct denominator 1CA simplification/hours 1A full day's work 1A hours of complete days to last day 1CA day and time</p> <p style="text-align: right;">(6)</p> <p>[Accept Tues 10:00]</p>	


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.3 (b)	<p>✓ MCA 57 – 52 hours/ure = 5 working hours earlier/werksurevroeër</p> <p>2 hrs of Sunday and last 3 hrs of Saturday not worked 2 uur van Sondagen die laaste 3 ure van Saterdagiewerk</p> <p>20:00 – 16:00 = 3 hrs excluding supper/uur sonder aandete</p> <p>Finish at 16:15 on Saturday./Eindig Saterdag om 16:15 (Including tea break/teepouseingesluit)</p> <p>OR/OF</p> <p>52 hours claimed = 5 (Monday) + 40 (Tue to Fri) + 7 (Sat) 52 uregeëis = 5 (Maandag) + 40(Di tot Vry) + 7(Sat)</p> <p>Finish Saturday/Eindig Saterdag 8:00 + 7 hours + 15 min (tea 1) + 45 min (lunch) + 15 min (tea 2) = 16:15 [also accept 16:00 since they are not paid for tea time] [aanvaarook 16:00 aangesien hulle nie vir teepouse betaal word nie]</p>	<p>1MCA hrs less from marking [CA from 2.1.3 (a)]</p> <p>1A separation of hrs</p> <p>1CA time 1CA day</p> <p>OR/OF</p> <p>1MA breaking up the time 1A the hours per day</p> <p>1CA day</p> <p>1CA time</p> <p>AO</p>	M L3
2.1.3 (c)	<p>Some candidates omitted some questions or sub-sections. Sommige kandidaatelaatvrae of onderafdelingsuit.</p> <p>OR/OF</p> <p>Some candidates wrote short answers (skipping other steps or lines or sentences). Sommige kandidates kryf verkorte antwoorde (laatstappe uit)</p> <p>OR/OF</p> <p>Responses were very clear to follow. ✓✓ O Antwoorde was baie maklik omtevolg</p> <p>OR/OF</p> <p>Some markers mark fast. ✓✓ O Sommige nasieners kon vinnig nasien.</p> <p>OR/OF</p> <p>Markers took shorter breaks ✓✓ O Merkers het korter pouses geneem</p>	<p>2O reason</p>	M L4

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.1.4	<p>Transport/Vervoer = 11 542 km × R3,26 / km ✓ MA</p> <p>= R 37 626,92 ✓ CA</p> <p>Marking/Nasien:</p> <p>= 2 × 79 × R244,35 + 5 × 65 × R211,75 + 23 × 52 × R195,50</p> <p>= 2 × R19 303,65 + 5 × R13 763,75 + 23 × R10 166 ✓ MCA</p> <p>= R38 607,3 + R68 818,75 + R233 818</p> <p>= R341 244,05 ✓ CA</p> <p>Total/Totaal = R341 244,05 + R 37 626,92</p> <p>= R378 870, 97. ✓ CA</p> <p>R400 000 budget will be enough/begroting is genoegsaam. ✓ O</p>	<p>1MA calculation</p> <p>1CA amount</p> <p>1MCA multiply correct number of persons by amount claimed</p> <p>1CA simplification</p> <p>1CA total</p> <p>1O conclusion</p> <p>(6)</p>	F L4
2.2.1	<p>Diameter = 1 m + 0,8 m + 0,8 m = 2,6 m ✓ A</p> <p>Area of big circle/Oppervlakte van grootsirkel</p> <p>= 3,142 × $\left(\frac{2,6 \text{ m}}{2}\right)^2$ ✓ SF</p> <p>= 5,30998 m² ✓ CA</p> <p>Area of the small circle/kleinsirkel = 3,142 × (0,5 m)²</p> <p>= 0,7855 m² ✓ MA</p> <p>Area of the wood/Oppervlakte van hout = 2,7 m × 2,7 m</p> <p>= 7,29 m² ✓ A</p> <p>Cut-off/Afgesny = 7,29 m² – 5,30998 m² + 0,7855 m² ✓ MCA</p> <p>= 1,98002 m² + 0,7855 m²</p> <p>≈ 2,77 m² ✓ CA</p> <p>Statement is NOT valid/Bewering is NIE geldig NIE ✓ O</p> <p style="text-align: center;">OR/OF</p> <p>Cut-off wood (in m²) /Afgesnydehout (in m²)</p> <p>= Area_(square) – [Area_(big circle) – Area_(small circle)]</p> <p>= 2,7 × 2,7 – [3,142 (0,8 + 0,5)² – 3,142 (0,5)²]</p> <p>✓ A ✓ CA ✓ MA</p> <p>= 7,29 – [5,30998 – 0,7855]</p> <p>= 7,29 – 4,52448 ✓ M</p> <p>= 2,76552. ✓ CA</p> <p>Which is more than 2,01. Hence, the statement is not valid</p> <p>Dit is meer as die 2,01, gevolglik is die bewering nie geldig nie. ✓ O</p>	<p>1A diameter</p> <p>1SF circle formula</p> <p>1CA area big circle</p> <p>1MA area small circle</p> <p>1A area of the wood</p> <p>1MCA subtracting total circles from square area wood</p> <p>1CA area</p> <p>1O conclusion</p> <p style="text-align: center;">OR/OF</p> <p>1A radius big circle</p> <p>1SF circle formula</p> <p>1CA area big circle</p> <p>1MA area small circle</p> <p>1A area of the wood</p> <p>1M subtracting total circles from square area wood</p> <p>1CA area</p> <p>1O conclusion</p>	M L4


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
	OR/OF	OR/OF	
	Area of semi-circle = $\frac{1}{2} \pi \times r^2$ ✓A	1A diameter/ radius	
	Outer circle/ <i>Buite sirkel</i> = $\frac{1}{2} \times 3,142 \times (1,3 \text{ m})^2$ ✓SF	1SF circle formula	
	= 2,65499m ² ✓CA	1CA area big circle	
	Inner circle/ <i>Binne sirkel</i> = $\frac{1}{2} \times 3,142 \times (0,5 \text{ m})^2$		
	= 0,39275 m ² ✓MA	1MA area small circle	
	Desk/ <i>tafel</i> = 2,65488m ² – 0,39275m ²		
	= 2,26224m ² ✓CA	1CA area of the wood	
	Total area/ <i>Totale oppervlak</i> = 2,26224 m ² × 2		
	= 4,52448 m ² ✓MCA	1MCA total circles area	
	Cut-off Area/ <i>Afsny hout</i> = 7,29 m ² – 4,452448 m ²		
	= 2,7552 m ² ✓CA	1CA area	
	Statement not valid / <i>Bewering is nie GELDIG nie</i> ✓O	1O conclusion	
	OR/OF	OR/OF	
	Area of big semi-circle / <i>Oppervlakte van groot halfsirkel</i>	1A diameter/ radius	
	= $3,142 \times 1,3^2 \div 2 = 2,65499 \text{ m}^2$ ✓A ✓SF ✓CA	1SF circle formula	
		1CA area big circle	
	Area of small semi-circle / <i>Oppervlakte van klein halfsirkel</i>		
	= $3,142 \times 0,5^2 \div 2 = 0,3927 \text{ m}^2$ ✓MA	1MA area small circle	
	One semi-circular top/ <i>Een halfsirkel bo-kant</i>		
	= 2,65499 – 0,3927 = 2,26224 m ²		
	Area of two semi-circular tops/ <i>Oppervlakte van 2 halfsirkels</i>		
	= 2,26224 × 2 = 4,52448 m ² ✓MCA	1MCA total circles area	
	Square Board/ <i>Vierkantige hout</i> = 2,7 × 2,7 = 7,29 m ² ✓A	1A area of the wood	
	Cut-off / <i>Afsny</i> = 7,29 m ² – 4,52448 m ² ≈ 2,77 m ² ✓CA	1CA area	
	Statement not valid/ <i>Bewering is nie GELDIG nie</i> ✓O	1O conclusion	

(8)

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
2.2.2	$\text{Volume wood/hout} = 2,7 \text{ m} \times 2,7 \text{ m} \times 0,038 \text{ m}$ $= 0,27702 \text{ m}^3$ <p>Price of one piece of wood excl.VAT <i>Prys van een stuk hout BTW uitgesluit</i></p> $= 0,27702 \text{ m}^3 \times \text{R}1\,215 = \text{R}336,58$ <p>Price including VAT/<i>Prys BTW ingesluit</i> = $\text{R}336,58 \times 1,15$ = $\text{R}387,07$</p> <p>12 semi-circles cut form 6 boards/<i>12 halfrondes word uit 6 borde gesny</i></p> $\text{Cost/Koste} = \text{R}387,07 \times 6$ $= \text{R}2\,322,40$ <p style="text-align: center;">OR/OF</p> $\text{Volumewood/hout} = 2,7 \text{ m} \times 2,7 \text{ m} \times 0,038 \text{ m}$ $= 0,27702 \text{ m}^3$ <p>Volume of 6 woodenboards <i>Volume vir 6 houtborde</i> = $0,27702 \text{ m}^3 \times 6$ = $1,66212 \text{ m}^3$</p> <p>Cost of 6 boards/<i>Koste van 6 borde</i> = $1,66212 \times \text{R}1\,215$ = $\text{R}2\,019,48$</p> <p>Cost with VAT/<i>Koste met BTW</i></p> $= \text{R}2\,019,48 + (15\% \times \text{R}2\,019,48)$ $= \text{R}2\,322,40$ <p style="text-align: center;">OR/OF</p> <p>Price of wood including VAT/<i>Prys van hout BTW ingesluit</i> = $\text{R}1\,215 \times 1,15 = \text{R}1\,397,25$</p> $\text{Volume wood/hout} = 2,7 \text{ m} \times 2,7 \text{ m} \times 0,038 \text{ m}$ $= 0,27702 \text{ m}^3$ <p>Cost/Koste = $\text{R}1\,397,25 \times 0,27702$ = $\text{R}387,07$</p> <p>Cost for 12 semicircles/<i>Koste vir 12 halvesirkels</i> = $\text{R}387,07 \times 6$ = $\text{R}2\,322,40$</p>	<p>1SF volume of wood 1C conversion 1CA simplification</p> <p>1MA calculating cost</p> <p>1MCA adding 15%</p> <p>1A 6 boards 1CA cost</p> <p style="text-align: center;">OR/OF</p> <p>1SF volume of wood 1C conversion 1CA simplification</p> <p>1A 6 boards</p> <p>1MA calculating cost</p> <p>1MCA adding 15%</p> <p>1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1MCA adding 15%</p> <p>1SF volume of wood 1C conversion 1CA simplification</p> <p>1MA calculating cost</p> <p>1A 6 boards 1CA simplification</p>	<p>F L3</p> <p style="text-align: right;">(7)</p> <p style="text-align: right;">[38]</p>

QUESTION/VRAAG3 [39 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
3.1.1	$\checkmark A$ The data is discrete./Die data is diskreet $\checkmark\checkmark O$ Percentages run from 0 to 100 and depends on the total of the test and the mark obtained. It is presented as whole numbers. <i>Persentasies is van 0 tot 100 en hang af van die totaal van die toets en die punt behaal. Hier is dit aangebied as heelgetalle.</i>	1A discrete 2O opinion (3)	D L4
3.1.2	Median score test 2/mediaan $= \frac{66+67}{2}$ $\checkmark RT \checkmark M$ $= 66,5$ $\checkmark CA$	1RT correct value 1M median concept 1CA simplification (3)	D L2
3.1.3	$\checkmark MA$ Mean/Gemiddeld = $\frac{Y (\% \text{ mark}) + 1443}{18} = 84$ $\checkmark MA$ $Y (\% \text{ mark}) = 18 \times 84 - 1443$ $\checkmark M$ $= 69\%$ $\checkmark CA$ OR/OF  $18 \times 84 = 1512$ $\checkmark MA$ $Y + 1443 = 1512$ $\checkmark MA$ $Y = 1512 - 1443$ $\checkmark M$ $= 69\%$ $\checkmark CA$	1MA adding all known% marks 1MA mean concept 1M changing the subject 1CA simplification OR/OF 1MA mean concept 1MA adding all known % marks 1M changing the subject 1CA simplification (4)	D L3
3.1.4	$\checkmark\checkmark RT$ Helen : $87\% - 57\% = 30\%$ $\checkmark RT$ Kevin : $97\% - 67\% = 30\%$ [Note: Afrikaans scripts the answers will be Paul & Oscar]	2RT candidate 1RT candidate (3)	D L3
3.1.5	$Q_3/K_3 = 71\%$ $\checkmark A$ $Q_1/K_1 = 61\%$ $\checkmark A$ $IQR = Q_3 - Q_1 / IKO = K_3 - K_1$ $= 71\% - 61\%$ $\checkmark MCA$ $= 10\%$ $\checkmark CA$	1A quartile 3 1A quartile Q_1 1MCA IQR concept 1CA simplification (4)	D L3


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L										
3.1.6	$P_{(\text{non distinction/nie onderskeiding})} = \frac{8}{18} \quad \checkmark A$ $= \frac{4}{9} \quad \checkmark CA$ <p style="text-align: center;">OR/OF</p> $P_{(\text{distinction/onderskeiding})} = \frac{10}{18} = \frac{5}{9} \quad \checkmark A$ $P_{(\text{not distinction/nie onderskeiding})} = 1 - \frac{5}{9} = \frac{4}{9} \quad \checkmark CA$	<p>CA value of Y from 3.1.3</p> <p>1A numerator 1A denominator</p> <p>1CA simplification</p> <p style="text-align: center;">OR/OF</p> <p>1A numerator 1MA subtracting from 1 1CA simplification</p> <p style="text-align: right;">(3)</p>	P L3										
3.1.7	Mode/Modus = 73% $\checkmark\checkmark A$	2A modal value (2)	D L2										
3.2.1	View Terrace OR/OF View OR/OF Terrace $\checkmark\checkmark RT$	2RT Reading from the map (2)	MP L2										
3.2.2	<p style="text-align: center;">$\checkmark\checkmark O$</p> <p>Facing oncoming traffic/Sy gaan in aankomende verkeer vasry</p> <p style="text-align: center;">OR/OF</p> <p>One way road/Dit is 'n eenrigtingpad $\checkmark\checkmark O$</p>	2O reason (2)	MP L4										
3.2.3	North west/Noordwes or/of NW $\checkmark\checkmark A$	2A correct direction (2)	MP L2										
3.2.4	$\checkmark A$ $21 \text{ mm} = 110 \text{ yards/jaart}$ $\checkmark A$ $XY = \frac{50 \times 110}{21} \quad \checkmark M$ $XY = 261,904 \dots \text{yards/jaart} \quad \checkmark CA$ $\approx 262 \text{ yards/jaart}$ [Bar scale accept measurements in the range 20 mm to 23 mm For XY measurements in the range 47 mm to 53 mm]	1A measuring scale 1A measuring distance 1M working with scale 1CA answer NPR	MP L3										
3.2.5 (a)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Parking offence</td> <td style="width: 50%;">Parkeer boete $\checkmark\checkmark O$</td> </tr> <tr> <td>Street parking is limited to 1 hour before 5 pm</td> <td>Parkering is beperk tot 1 uur voor 5nm.</td> </tr> <tr> <td>Exceeded allowable duration of parking.</td> <td>Oorskryding van toegelate parkering</td> </tr> <tr> <td>Free parking time was over</td> <td>Gratis parkeering het verstryk</td> </tr> <tr> <td>Parked for more than 1 hour.</td> <td>Parkeer vir meer as 1 uur</td> </tr> </table>	Parking offence	Parkeer boete $\checkmark\checkmark O$	Street parking is limited to 1 hour before 5 pm	Parkering is beperk tot 1 uur voor 5nm.	Exceeded allowable duration of parking.	Oorskryding van toegelate parkering	Free parking time was over	Gratis parkeering het verstryk	Parked for more than 1 hour.	Parkeer vir meer as 1 uur	2O Reason for charge (2)	MP L4
Parking offence	Parkeer boete $\checkmark\checkmark O$												
Street parking is limited to 1 hour before 5 pm	Parkering is beperk tot 1 uur voor 5nm.												
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Free parking time was over	Gratis parkeering het verstryk												
Parked for more than 1 hour.	Parkeer vir meer as 1 uur												

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.2.5 (b)	$\text{From/Vanaf } 12:00 - 15:25 = (3 - 1) + \frac{25}{60} \quad \checkmark\text{M} \quad \checkmark\text{C}$ $= 2,4166666667 \text{ hours/uur} \quad \checkmark\text{CA}$ $\text{Rate per hour/Koers per uur} = \frac{\pounds 79,75}{2,4166666667} \quad \checkmark\text{M}$ $= \pounds 33 \quad \checkmark\text{CA}$ <p style="text-align: center;">OR/OF</p> <p>From/Vanaf 12:00 - 15:25 = 3 h 25 min</p> <p>Hours she was charged for /Ure waarvoor sy beboet is</p> $3 \text{ h } 25 \text{ min} - 1 \text{ h} = 2 \text{ h } 25 \text{ min} \quad \checkmark\text{M} \quad \checkmark\text{CA}$ $2 \text{ h } 25 \text{ min} = 145 \text{ min} \quad \checkmark\text{C}$ $\text{Rate per hour/Koers per uur} = \frac{79,75 \times 60}{145} \quad \checkmark\text{M}$  $= \frac{4785}{145}$ $= \pounds 33 \quad \checkmark\text{CA}$	<p>1M subtracting free hour 1C conversion minutes into hours</p> <p>1CA total charged hours</p> <p>1M division by hours</p> <p>1CA simplification rounded to the nearest pound</p> <p style="text-align: center;">OR/OF</p> <p>1M subtracting free hour 1CA total charged hours 1C conversion hours into minutes</p> <p>1M division by minutes</p> <p>1CA simplification rounded to the nearest pound</p>	<p>F L3</p> <p style="text-align: right;">(5)</p>
			[39]

QUESTION/VRAAG4 [34 MARKS/PUNTE]			
Q/V	Solution/Oplossing	Explanation/Verduideliking	T&L
4.1.1	$P_{(\text{odd seat/oneve})} = \frac{2}{288} \times 100\%$ $= 0,69\%$	1A numerator 1A total seats 1CA simplification (3)	L2 P
4.1.2	$\frac{\checkmark RT}{D10} \checkmark RT$	1RT row 1RT seat (2)	L2 MP
4.1.3	Person at D7: <ul style="list-style-type: none"> Turn left walk towards the corridor./<i>Draai links en loop na die gang.</i> Turn right walk towards the stage./<i>Draai regs en loop na die verhoog.</i> At end of the corridor turn left./<i>Aan die einde van die gang draai links.</i> Walk towards the last seat in the front of section B./<i>Loop na die laastesitplek in afdeling B.</i> 	1A turn left and walk 1A turn right towards stage 1A turn left end of corridor 1A last seat; section B (4)	L3 MP
4.1.4	Collection/Insameling: $\text{Adults/Volwassenes: } 150 \times \$28,60 = \$4\,290$ $\text{Students/Studente: } 57 \times \$26,40 = \$1\,504,80$ $\text{Kids/Kinders: } 33 \times \$17,60 = \$580,80$ Total collection/Totaalingsamel $= \$4\,290 + \$1\,504,80 + \$580,80$ $= \$6\,375,60$ Excluding VAT/Sonder BTW $= \frac{\$6\,375,60}{1,10} = \$5\,796$ Claim is CORRECT/Opmerking is KORREK	1MA multiply tariff by relevant total patrons. 1CA amount 1CA amount 1CA amount 1MCA total collection 1MCA dividing by 1,10 1CA amount excl. VAT 1O conclusion	F L4

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
	<p style="text-align: center;">OR/OF</p> <p>Adults/volwassenes = 53 + 57 + 40 = 150 \checkmark MA Cost/Koste = \$28,60 \times 150 = \$4 290 \checkmark MCA Cost excl VAT /Koste BTW uitgesluit = \$4 290 \div 1,10 = \$3 900 \checkmark CA Students/Studente = 15 + 32 + 10 = 57 Cost/Koste = \$26,40 \times 57 = \$1 504,80 Cost excl VAT /Koste BTW uitgesluit = \$1 504,80 \div 1,10 = \$1 368 \checkmark CA Children = 9+15+9 = 33 Cost/Koste = \$17,60 \times 33 = \$580,80 Cost excl VAT/Koste BTW uitgesluit = \$580,80 \div 1,10 = \$528 \checkmark CA Total/Totaal = \$3 900 + \$1 368 + \$528 \checkmark MCA = \$5 796 \checkmark CA The claim is correct/ Opmerking is KORREK \checkmark O</p>	<p style="text-align: center;">OR/OF</p> <p>1MA multiply tariff by relevant total patrons. 1MCA dividing by 1,10 1CA amount 1CA amount 1CA amount 1MCA total collection 1CA amount excl. VAT 1O conclusion</p>	
	<p style="text-align: center;">OR/OF</p> <p>Section A/Afdeling A: \checkmark MA = 53 \times 28,60 + 15 \times 26,40 + 9 \times 17,60 = 1 515,80 + 396,00 + 158,40 = 2 070,20 \checkmark CA</p> <p>Section B/ Afdeling B: = 57 \times 28,60 + 32 \times 26,40 + 15 \times 17,60 = 1 630,20 + 844,80 + 264,00 = 2 739,00 \checkmark CA</p> <p>Section C/ Afdeling C: = 40 \times 28,60 + 10 \times 26,40 + 9 \times 17,60 = 1 144,00 + 264,00 + 158,40 = 1 566,40 \checkmark CA</p> <p>Total amount of Sections = 2 070,20 + 2 739,00 + 1 566,40 = \$6 375,60 \checkmark MCA Excluding VAT/Sonder BTW = $\frac{\\$6 375,60}{1,10}$ = \$5 796 \checkmark MCA \checkmark CA</p> <p>or/of \$5 796 \times 1,1 = \$6 375,60 which equals total collection</p> <p>Claim is CORRECT/Opmerking is KORREK \checkmark O</p>	<p style="text-align: center;">OR/OF</p> <p>1MA multiply tariff by relevant total patrons. 1CA amount 1CA amount 1MCA total collection 1MCA dividing by 1,10 1CA amount excl. VAT 1O conclusion</p>	



Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
	<p style="text-align: center;">OR/OF</p> <p>Adult / <i>Volwasse nes</i> \checkmark MCA Price excl. VAT/<i>Prys sonder BTW</i> = $\\$28,60 \times \frac{100}{110} = \\26 \checkmark MA Total amount/<i>Totale bedrag</i> = $26 \times 150 = \\$3\,900$ \checkmark CA</p> <p>Student /<i>Studente</i> Price excl. VAT /<i>Prys sonder BTW</i> = $\\$26,40 \times \frac{100}{110} = \\24 Total amount/<i>Totale bedrag</i> = $\\$24 \times 57 = \\$1\,368$ \checkmark CA</p> <p>Children/<i>Kinders</i> Price excl. VAT/ <i>Prys sonder BTW</i> = $\\$17,60 \times \frac{100}{110} = \\16 Total amount/<i>Totale bedrag</i> = $\\$16 \times 33 = \\528 \checkmark CA</p> <p>Total collection/ <i>Totale insameling</i> = $3\,900 + 1\,368 + 528$ \checkmark MCA = $\\$5\,796$ \checkmark CA</p> <p>Claim is CORRECT/<i>Opmerking is KORREK</i> \checkmark O</p>	<p style="text-align: center;">OR/OF</p> <p>1MCA dividing by 1,10 1MA multiply tariff by relevant total patrons. 1CA amount</p> <p>1CA amount</p> <p>1CA amount</p> <p>1MCA total collection 1CA amount excl. VAT</p> <p>1O conclusion</p> <p style="text-align: right;">(8)</p>	
4.1.5	<p style="text-align: center;"></p> <p>Cost in USD/<i>Koste in VSD</i> \checkmark RT = $\\$30,50 \times 0,71$ = 21,655 USD/VSD \checkmark MCA</p> <p>Cost in rand/<i>Koste in rand</i> = $\\$21,655 \times R14,43/\\$ = R312,48 \checkmark MCA</p> <p style="text-align: center;">OR/OF</p> <p>Conversion factor ZAR to AUD /<i>Herleidingsfaktor</i> : $R14,43 \times 0,71 = R10,2453$ \checkmark A \checkmark RT $\\$30,50 \times R10,2453$ = R312,48 \checkmark MCA</p> <p style="text-align: center;">OR/OF</p> <p>Conversion to ZAR/ <i>Herlei na ZAR</i> \checkmark RT = $\\$30,50 \times 0,71 \times R14,43$ \checkmark MCA = R312,48 \checkmark MCA</p>	<p>1RT ticket price 1MCA answer in USD</p> <p>1MCA answer in rand</p> <p style="text-align: center;">OR/OF</p> <p>1A Conversion factor 1RT ticket price 1MCA answer in rand</p> <p style="text-align: center;">OR/OF</p> <p>1RT ticket price 1MCA Conversion 1MCA answer in rand</p> <p style="text-align: right;">(3)</p>	L2 F

4.2.1	<p style="text-align: center;">AUSTRALIAN INFLATION RATE FOR 2017 AND 2018</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>June</th> <th>July</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>□ 2017</td> <td>2.5</td> <td>2.74</td> <td>2.38</td> <td>2.2</td> <td>1.87</td> <td>1.63</td> <td>1.73</td> <td>1.94</td> <td>2.23</td> <td>2.04</td> <td>2.2</td> <td>2.11</td> </tr> <tr> <td>■ 2018</td> <td>2.07</td> <td>2.21</td> <td>2.36</td> <td>2.46</td> <td>2.8</td> <td>2.87</td> <td>2.95</td> <td>2.7</td> <td>2.28</td> <td>2.52</td> <td>2.18</td> <td>1.91</td> </tr> </tbody> </table> <p>5 × A for each correct bar</p> <p style="text-align: right;">(5)</p>		Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	□ 2017	2.5	2.74	2.38	2.2	1.87	1.63	1.73	1.94	2.23	2.04	2.2	2.11	■ 2018	2.07	2.21	2.36	2.46	2.8	2.87	2.95	2.7	2.28	2.52	2.18	1.91	L2 D
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec																													
□ 2017	2.5	2.74	2.38	2.2	1.87	1.63	1.73	1.94	2.23	2.04	2.2	2.11																													
■ 2018	2.07	2.21	2.36	2.46	2.8	2.87	2.95	2.7	2.28	2.52	2.18	1.91																													
4.2.2	<p>✓A June/<i>Junie</i></p> <p style="text-align: center;">✓MCA</p> <p>Difference/<i>Verskil</i> = 2,87% – 1,63% = 1,24% ✓CA</p> <p style="text-align: center;"></p>	<p>1A correct month 1MCA subtracting values 1CA simplification</p> <p style="text-align: right;">(3)</p>	L3 F																																						
4.2.3	<p style="text-align: right;">✓ RT</p> <p>Inflation Nov/<i>Inflasie Nov</i> = AUD 156 831,36 × 2,18 % = AUD 3418,92</p> <p style="text-align: right;">✓ MCA</p> <p>Dec cost of car /<i>Des koste</i> = AUD 156 831,36 + AUD 3418,92 = AUD 160 250,28 ✓ CA</p> <p>Inflation Dec/<i>Inflasie Des</i> = AUD 160 250,28 × 1,91 % = AUD 3 060,78</p> <p>Jan. cost of car/<i>Koste in Jan.</i> = AUD 160 250,28 + AUD 3 060,78 = AUD 163 311,06 ✓ CA</p> <p>Increase/<i>Verhoging</i> = AUD 163 311,06 – AUD 156 831,36 = AUD 6 479,70 ✓ CA</p> <p>He is incorrect/<i>Hy is NIE korrek NIE</i> ✓ O</p>	<p>1RT correct rate</p> <p>1MCA Increasing</p> <p>1CA simplification</p> <p>1CA simplification second month cost</p> <p>1CA increase</p> <p>1O opinion</p>	F L4																																						

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.2.3	<p style="text-align: center;">OR/OF</p> <p>Inflation Nov/<i>Inflasie Nov</i> = \$156 831,36 × 2,18%^{✓RT} = \$3418,92</p> <p>Dec. cost of car /<i>Des koste</i> = \$ 156 831,36 + \$3418,92^{✓MCA} = \$ 160 250,28^{✓CA}</p> <p>Inflation Dec/<i>Inflasie Des</i> = \$ 160 250,28 × 1,91 % = \$ 3 060,78^{✓CA}</p> <p>Price increase = Inflation Nov + Inflation Dec <i>Prysverhoging</i> = <i>Inflasie Nov</i> + <i>Inflasie Des</i> = \$3418,92 + \$ 3 060,78 = \$ 6 479,70^{✓CA}</p> <p>He is incorrect/<i>Hy is NIE korrek NIE</i>^{✓O}</p> <p style="text-align: center;">OR/OF</p> <p>December/ <i>Desember</i>: Cost of car/<i>Koste van motor</i> = \$156 831,36 × 102,18%^{✓RT} = \$160 250,28^{✓MCA}</p> <p>January/<i>Januarie</i> Cost of car/<i>Koste</i> = \$ 160 250,28 × 101,91 % = \$ 163 311,06^{✓CA}</p> <p>Increase/<i>Verhoging</i> = \$ 163 311,06 – \$156 831,36 = \$ 6 479,70^{✓CA}</p> <p>He is incorrect/<i>Hy is verkeerd</i>^{✓O}</p> <p style="text-align: center;">OR/OF</p> <p>Price in January /<i>Prys in Januarie</i> = AUD 156 831,36 × 1,0218 × 1,0191^{✓RT ✓MCA ✓CA} = AUD 163 311,0641^{✓CA}</p> <p>Increase/<i>Verhoging</i> = AUD 163 311,06 – AUD 156 831,36 = AUD 6 479,70^{✓CA}</p> <p>Incorrect/ <i>Nie korrek nie</i>^{✓O}</p>	<p style="text-align: center;">OR/OF</p> <p>1RT correct rate</p> <p>1MCA Increasing</p> <p>1CA simplification</p> <p>1CA simplification second month inflation</p> <p>1CA increase</p> <p>1O opinion</p> <p style="text-align: center;">OR/OF</p> <p>1RT correct rate</p> <p>1MCA Increasing by %</p> <p>1CA simplification</p> <p>1CA simplification</p> <p>1CA increase</p> <p>1O opinion</p> <p style="text-align: center;">OR/OF</p> <p>1RT correct rate</p> <p>1MCA Increasing</p> <p>1CA Increasing</p> <p>1CA simplification</p> <p>1CA increase</p> <p>1O opinion</p>	<p>F</p> <p>L4</p>

	<p style="text-align: center;">OR/OF</p> <p>December price / <i>Desember prys</i> = AUD 156 831,36 × 1,0218 = AUD 160 250,28</p> <p style="text-align: right;">✓RT ✓MCA ✓CA</p> <p>January price / <i>Januarie prys</i> = AUD 160 250,28 × 1,0191 = AUD 163 311,06</p> <p style="text-align: right;">✓CA</p> <p>Adding the increase to the price in November <i>Tel die verhoging by die prys in November</i> = AUD 156 831,36 + AUD 6 500 = AUD 163 331,36 ✓CA</p> <p>Therefore / <i>dus</i> AUD 163 331,36 ≠ AUD 163 311,06 Incorrect / <i>Nie korrek nie</i> ✓O</p> <p style="text-align: center;">OR/OF</p> <p>Price end October = AUD 156 831,36 January price / <i>Januarie prys</i> = AUD 156 831,36 × 1,0218 × 1,0191 = AUD 163 311,0641 ✓CA</p> <p style="text-align: right;">✓RT ✓MCA ✓M</p> <p>Subtracting stated increase / <i>Trek die beweerde verhoging af</i> AUD 163 311,0641 – AUD 6 500 = AUD 156 811,06 ✓CA</p> <p>Therefore / <i>dus</i> AUD 156 831,36 ≠ AUD 156 811,06 Incorrect / <i>Nie korrek nie</i> ✓O</p>	<p style="text-align: center;">OR/OF</p> <p>1RT correct rate 1MCA Increasing by % 1CA simplification</p> <p>1CA simplification</p> <p>1CA increase</p> <p>1O opinion</p> <p style="text-align: center;">OR/OF</p> <p>1RT correct rate 1M Increasing by % 1M Increasing by %</p> <p>1CA simplification</p> <p>1CA comparing values</p> <p>1O opinion</p> <p style="text-align: right;">(6)</p>	
		[34]	
	TOTAL/TOTAAL:150		