



# 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**

<b>Symbol/Kode</b>	<b>Explanation/Verduideliking</b>
<b>M</b>	Method/Metode
<b>MA</b>	Method with accuracy/Metode met akkuraatheid
<b>CA</b>	Consistent accuracy/Volgehoueakkuraatheid
<b>A</b>	Accuracy/Akkuraatheid
<b>C</b>	Conversion/Herleiding
<b>S</b>	Simplification/Vereenvoudiging
<b>RT</b>	Reading from a table/a graph/document/diagram/Lees vanaf tabel/grafiek/diagram
<b>SF</b>	Correct substitution in a formula/Korrektevervanging in formule
<b>O</b>	Opinion/Explanation/Opinie/Verduideliking
<b>P</b>	Penalty, e.g. for no units, incorrect rounding off, etc./Penalisasie, bv. virgeeneenhede/verkeerde afronding, ens.
<b>R</b>	Rounding off/Afronding
<b>NPR</b>	No penalty for rounding/Geenpenalisasievirafrondingnie
<b>AO</b>	Answer only/Slegsantwoord
<b>MCA</b>	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)/% verhoging (Turkye)</p> $= \frac{1\,221\,165 - 1\,064\,190}{1\,064\,190} \times 100\% \quad \checkmark M$ $= \frac{156\,975}{1\,064\,190} \times 100\%$ $= 14,75\% \quad \checkmark CA$ <p>% increase(United Kingdom) /% verhoging (Verenigde Koninkryk)</p> $= \frac{2\,248\,162 - 1\,596\,803}{1\,596\,803} \times 100\% \quad \checkmark MA$ $= 40,79\% \quad \checkmark CA$ <p>United Kingdom has the biggest percentage increase/Verenigde Koninkryk het die grootste persentasie verhoging. <math>\checkmark CA</math></p> <p style="text-align: center;"><b>OR/OF</b> </p> <p>Turkey: <math>(1\,221\,165 \div 1\,064\,190) \times 100\%</math></p> $= 114,75\%$ <p>% increase (Turkey) = <math>114,75\% - 100\%</math> <math>\checkmark M</math></p> $= 14,75\% \quad \checkmark CA$ <p>(United Kingdom): <math>(2\,248\,162 \div 1\,596\,803) \times 100\%</math></p> $= 140,79\%$ <p>% increase United Kingdom = <math>140,79\% - 100\%</math></p> $= 40,79\% \quad \checkmark CA$ <p>United Kingdom has the biggest percentage increase /Verenigde Koninkryk het die grootste persentasie verhoging. <math>\checkmark CA</math></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;"><b>OR/OF</b></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 <b>NPR</b></p> <p style="text-align: right;">(6)</p>	D L3
1.1.5	<p>Probability (decline 2015-2016) /Waarskynlikheid</p> $= \frac{3}{11} \quad \checkmark A$ $\approx 0,27 \quad \checkmark CA$	<p>1A numerator 1A denominator</p> <p>1CA as decimal <b>NPR</b></p> <p style="text-align: right;">(3)</p>	P L3

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

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
1.2.1	<p>Profit/Wins = R30 × 120% = R36 ✓MA</p> <p>Profit per marble / Wins per albaster = <math>\frac{R36}{100} = R0,36</math> ✓CA</p> <p>Cost price per marble/Kosprys per albaster = <math>\frac{R30}{100} = R0,30</math> ✓A</p> <p>Selling price/Verkoopprys = R0,36 + R0,30 = R0,66 per marble/albaster ✓MCA</p> <p style="text-align: center;"><b>OR/OF</b></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 = <math>\frac{R30 \times 120\%}{100\%}</math> = R36 per pack</p> <p>Price of selling 1 marble is/Verkoopprys per albaster is: <math>\frac{R30 + R36}{100}</math> ✓MCA ✓M = R0,66 ✓CA</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Selling price/verkoopprys = R30 × 220% = R66 ✓MA ✓MCA Price per marble/Prys per albaster = <math>\frac{R66}{100} = R0,66</math> ✓M ✓CA</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Price per marble/Prys per albaster = <math>\frac{30}{100} = R0,30</math> ✓MA</p> <p>Selling price/verkoopprys = 0,3 × 2,2 ✓M ✓MCA = R0,66 ✓CA</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Selling price /verkoopprys = 30 × 2,2 = R66 ✓MA ✓MCA</p> <p>Price per marble/Prys per albaster = <math>\frac{66}{100}</math> ✓M ✓CA = R0,66 ✓CA</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;"><b>OR/OF</b></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;"><b>OR/OF</b></p> <p>1MA calculating % increase 1MCA selling price 1M dividing by 100 1CA simplification</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>1MA dividing by 100</p> <p>1M calculating % increase 1MCA selling price 1CA simplification</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>1MA calculating % increase 1MCA selling price 1M dividing by 100 1CA simplification <b>NPR</b></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 = <math>\frac{6,4}{2}</math> ✓C                      = 3,2 cm ✓MCA</p> <p>Volume of a cylinder/ <i>Volume van 'n silinder</i>                      = <math>\pi \times \text{radius}^2 \times \text{height}</math> ✓SF                      = <math>3,142 \times (3,2 \text{ cm})^2 \times 30 \text{ cm}</math>                      = <math>965,2224 \text{ cm}^3</math> ✓CA</p> <p>Volume of 2 bags of marbles/<i>volume van 2 sakkealbasters</i>                      = <math>2 \times 2 \text{ cm}^3 \times 100</math> ✓MA                      = <math>400 \text{ cm}^3</math> ✓CA</p> <p>Vol. Water to fill container/<i>Vol. water om houertevul</i>                      = <math>965,2224 \text{ cm}^3 - 400 \text{ cm}^3</math> ✓MCA                      = <math>565,2224 \text{ cm}^3</math> ✓CA  <math>\frac{1}{2} \ell = 500 \text{ cm}^3</math></p> <p>Statement is valid/<i>Bewering is geldig</i> ✓O</p> <p style="text-align: center;"><b>OR/OF</b>  <b>OR/OF</b></p> <p>Radius of container/houer = <math>\frac{6,4}{2} = 3,2 \text{ cm}</math> ✓C ✓MCA</p> <p>Volume of a cylinder/ <i>Volume van 'n silinder</i> ✓SF                      = <math>\pi \times \text{radius}^2 \times \text{height} = 3,142 \times 3,2 \text{ cm} \times 3,2 \text{ cm} \times 30 \text{ cm}</math>                      = <math>965,2224 \text{ cm}^3</math> <b>OR/OF</b> <math>0,9652224 \text{ litres}</math> ✓CA</p> <p>Volume of 2 bags of marbles/<i>volume van 2 sakke albasters</i>                      = <math>2 \times 2 \text{ cm}^3 \times 100</math> ✓MA                      = <math>400 \text{ cm}^3</math> <b>OR/OF</b> <math>0,4 \text{ litres}</math> ✓CA</p> <p>Vol. Water to fill container/<i>Vol. water om houertevul</i>                      = <math>965,2224 \text{ cm}^3 - 400 \text{ cm}^3</math> ✓MCA                      = <math>565,2224 \text{ cm}^3</math> ✓CA  <b>OR/OF</b>                      = <math>0,9652224 \ell - 0,4 \ell = 0,5652224 \ell</math>                      More than <math>0,5 \ell</math> <b>VALID</b> / <i>meer as <math>0,5 \ell</math> 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;"><b>OR/OF</b></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;"><b>OR/OF</b></p> <p>Radius of container/houer = <math>\frac{6,4}{2} = 3,2</math> cm ✓C ✓MCA</p> <p>Volume of a cylinder/ <i>Volume van 'n silinder</i>  <math>= \pi \times \text{radius}^2 \times \text{height}</math>  <math>= 3,142 \times 3,2 \text{ cm} \times 3,2 \text{ cm} \times 30 \text{ cm}</math> ✓SF  <math>= 965,2224 \text{ cm}^3</math> <b>OR/OF</b> 0,9652224 litres ✓CA</p> <p>Volume of 2 bags of marbles/<i>volume van 2 sakke albasters</i> =  <math>2 \times 2 \text{ cm}^3 \times 100</math> ✓MA ✓CA  <math>= 400 \text{ cm}^3</math> <b>OR/OF</b> 0,4 litres</p> <p><math>400 \text{ cm}^3 + 500 \text{ cm}^3 = 900 \text{ cm}^3</math> ✓MCA ✓CA</p> <p>This is less than <math>965,2224 \text{ cm}^3</math> of the cylinder , VALID ✓O  <i>Minder as <math>965,2224 \text{ cm}^3</math> van die silinder, GELDIG</i></p>	<p style="text-align: center;"><b>OR/OF</b></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>  <math>= 64 \text{ mm} + 2 \times 0,5 \text{ mm} = 65 \text{ mm}</math> ✓ MA</p> <p>Circumference = <math>\pi \times \text{diameter}</math> / <i>Omtrek = <math>\pi \times \text{middellyn}</math></i>  <math>= 3,142 \times (6,5) \text{ cm}</math> ✓ SF  <math>= 20,423 \text{ cm}</math> ✓ CA</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Radius = <math>32 \text{ mm} + 0,5 \text{ mm} = 32,5 \text{ mm}</math> ✓ MA  <math>= 3,25 \text{ cm}</math></p> <p>Circumference/<i>omtrek</i> = <math>2 \times \pi \times \text{radius}</math> ✓ SF  <math>= 2 \times 3,142 \times 3,25 \text{ cm}</math>  <math>= 20,423 \text{ cm}</math> ✓ CA</p>	<p>1MA increased diameter</p> <p>1SF substitution 1CA simplification</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>1MA increased radius</p> <p>1SF substitution 1CA simplification <b>NPR</b></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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>1<sup>st</sup> 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;"><b>OR/OF</b></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 1<sup>st</sup> day</p> <p>1A hours of complete days to last day</p> <p>1CA day &amp; time</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>1SF correct numerator 1SF correct denominator 1CA simplification/hours</p> <p>1A hours of 1<sup>st</sup> 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;"><b>OR/OF</b></p> <p>Number of marking hours/ <i>Getal nasien ure</i></p> $= \frac{2\,808 \times 28}{23 \times 60} \quad \checkmark \text{SF}$ $= 56,97391303 \text{ hours/ure} \approx 57 \text{ hours/ure} \quad \checkmark \text{CA}$ <p>57 hours: Monday/<i>Maandag</i> = 5 hrs/<i>uur</i> <math>\checkmark \text{A}</math>                      Rest of the days/<i>Res van die dae</i> = 57 hrs – 5 hrs                      = 52 hrs/<i>uur</i></p> <p>Full marking days/<i>Vol merk dae</i> = <math>\frac{52}{10}</math>                      = 5,2 days/<i>dae</i></p> <p style="text-align: center;">Therefore/<i>dus</i> 5 days + 0,2 days</p> <p>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> <math>\checkmark \text{A}</math></p> <p>Ends / <i>eindig</i> Sunday/<i>Sondag</i> 10:00 <math>\checkmark \text{CA}</math></p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Number of marking hours/ <i>Getal nasien ure</i></p> $= \frac{2\,808 \times 28}{23 \times 60} \quad \checkmark \text{SF}$ $\approx 57 \text{ hours/uur} \quad \checkmark \text{CA}$ <p>14:00 to 14:00 = 10 working hours /<i>werks ure</i> <math>\checkmark \text{A}</math>                      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> <math>\checkmark \text{A}</math></p> <p>Finish at 10:00 on Sunday <math>\checkmark \text{CA}</math>  <i>Eindig Sondag 10:00</i></p>	<p style="text-align: center;"><b>OR/OF</b></p> <p>1SF correct numerator                      1SF correct denominator</p> <p>1CA simplification/hours</p> <p>1A hours of 1<sup>st</sup> day</p> <p>1A hours of complete days                      to last day                      1CA day &amp; time</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>1SF correct numerator                      1SF correct denominator                      1CA simplification/hours</p> <p>1A full day's work</p> <p>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 Saterdagniegewerk</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><b>OR/OF</b></p> <p>✓ A      ✓ MA                      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 ✓ CA                      8:00 + 7 hours + 15 min (tea 1) + 45 min (lunch) + 15 min (tea 2) = 16:15 ✓ CA                      [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><b>OR/OF</b></p> <p>1MA breaking up the time                      1A the hours per day</p> <p>1CA day</p> <p>1CA time</p> <p><b>AO</b></p>	M L3
2.1.3 (c)	<p>Some candidates omitted some questions or sub-sections.                      Sommige kandidaatelaatvrae of onderafdelingsuit.</p> <p><b>OR/OF</b></p> <p>Some candidates wrote short answers (skipping other steps or lines or sentences).                      Sommige kandidates kryf verkorte antwoorde (laatstappe uit)</p> <p><b>OR/OF</b></p> <p>Responses were very clear to follow. ✓✓ O                      Antwoorde was baie maklik omtevolg</p> <p><b>OR/OF</b></p> <p>Some markers mark fast. ✓✓ O                      Sommige nasieners kon vinnig nasien.</p> <p><b>OR/OF</b></p> <p>Markers took shorter breaks ✓✓ O                      Merkers het korter pouses geneem</p>	<p>2O reason</p>	M L4

(4)

(2)

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 × <math>\left(\frac{2,6 \text{ m}}{2}\right)^2</math> ✓ SF</p> <p>= 5,30998 m<sup>2</sup> ✓ CA</p> <p>Area of the small circle/kleinsirkel = 3,142 × (0,5 m)<sup>2</sup></p> <p>= 0,7855 m<sup>2</sup> ✓ MA</p> <p>Area of the wood/Oppervlakte van hout = 2,7 m × 2,7 m</p> <p>= 7,29 m<sup>2</sup> ✓ A</p> <p>Cut-off/Afgesny = 7,29 m<sup>2</sup> – 5,30998 m<sup>2</sup> + 0,7855 m<sup>2</sup> ✓ MCA</p> <p>= 1,98002 m<sup>2</sup> + 0,7855 m<sup>2</sup></p> <p>≈ 2,77 m<sup>2</sup> ✓ CA</p> <p>Statement is NOT valid/Bewering is NIE geldig NIE ✓ O</p> <p><b>OR/OF</b></p> <p>Cut-off wood (in m<sup>2</sup>) /Afgesnyde hout (in m<sup>2</sup>)</p> <p>= Area<sub>(square)</sub> – [Area<sub>(big circle)</sub> – Area<sub>(small circle)</sub>]</p> <p>= 2,7 × 2,7 – [ 3,142 (0,8 + 0,5)<sup>2</sup> – 3,142 (0,5)<sup>2</sup> ]</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 ✓ O</p> <p>Dit is meer as die 2,01, gevolglik is die bewering nie geldig nie.</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><b>OR/OF</b></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
	<b>OR/OF</b>	<b>OR/OF</b>	
	Area of semi-circle = $\frac{1}{2} \pi \times r^2$ ✓A Outer circle/ <i>Buite sirkel</i> = $\frac{1}{2} \times 3,142 \times (1,3 \text{ m})^2$ ✓SF = 2,65499m <sup>2</sup> ✓CA Inner circle/ <i>Binne sirkel</i> = $\frac{1}{2} \times 3,142 \times (0,5 \text{ m})^2$ = 0,39275 m <sup>2</sup> ✓MA Desk/ <i>tafel</i> = 2,65488m <sup>2</sup> – 0,39275m <sup>2</sup> = 2,26224m <sup>2</sup> ✓CA Total area/ <i>Totale oppervlak</i> = 2,26224 m <sup>2</sup> × 2 = 4,52448 m <sup>2</sup> ✓MCA Cut-off Area/ <i>Afsny hout</i> = 7,29 m <sup>2</sup> – 4,452448 m <sup>2</sup> = 2,7552 m <sup>2</sup> ✓CA Statement not valid / <i>Bewering is nie GELDIG nie</i> ✓O	1A diameter/ radius 1SF circle formula  1CA area big circle  1MA area small circle  1CA area of the wood  1MCA total circles area  1CA area  1O conclusion	
	<b>OR/OF</b>	<b>OR/OF</b>	
	Area of big semi-circle / <i>Oppervlakte van groot halfsirkel</i> = $3,142 \times 1,3^2 \div 2 = 2,65499 \text{ m}^2$ ✓A ✓SF ✓CA 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 One semi-circular top/ <i>Een halfsirkel bo-kant</i> = 2,65499 – 0,3927 = 2,26224 m <sup>2</sup> Area of two semi-circular tops/ <i>Oppervlakte van 2 halfsirkels</i> = 2,26224 × 2 = 4,52448 m <sup>2</sup> ✓MCA Square Board/ <i>Vierkantige hout</i> = 2,7 × 2,7 = 7,29 m <sup>2</sup> ✓A Cut-off / <i>Afsny</i> = 7,29 m <sup>2</sup> – 4,52448 m <sup>2</sup> ≈ 2,77 m <sup>2</sup> ✓CA Statement not valid/ <i>Bewering is nie GELDIG nie</i> ✓O	1A diameter/ radius 1SF circle formula 1CA area big circle  1MA area small circle  1MCA total circles area  1A area of the wood  1CA area  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> = <math>\text{R}336,58 \times 1,15</math> = <math>\text{R}387,07</math></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;"><b>OR/OF</b></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> = <math>0,27702 \text{ m}^3 \times 6</math> = <math>1,66212 \text{ m}^3</math></p> <p>Cost of 6 boards/<i>Koste van 6 borde</i> = <math>1,66212 \times \text{R}1\,215</math> = <math>\text{R}2\,019,48</math></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;"><b>OR/OF</b></p> <p>Price of wood including VAT/<i>Prys van hout BTW ingesluit</i> = <math>\text{R}1\,215 \times 1,15 = \text{R}1\,397,25</math></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 = <math>\text{R}1\,397,25 \times 0,27702</math> = <math>\text{R}387,07</math></p> <p>Cost for 12 semicircles/<i>Koste vir 12 halvesirkels</i> = <math>\text{R}387,07 \times 6</math> = <math>\text{R}2\,322,40</math></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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>
		<b>[38]</b>	

<b>QUESTION/VRAAG3 [39 MARKS/PUNTE]</b>			
<b>Q/V</b>	<b>Solution/Oplossing</b>	<b>Explanation/Verduideliking</b>	<b>T&amp;L</b>
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 = $\frac{Y (\% \text{ mark}) + 1443}{18} = 84$ $\checkmark MA$ $Y (\% \text{ mark}) = 18 \times 84 - 1443$ $\checkmark M$ $= 69\%$ $\checkmark CA$  <b>OR/OF</b> $18 \times 84 = 1512$ $\checkmark MA$ $\checkmark MA$ $Y + 1443 = 1512$ $Y = 1512 - 1443$ $\checkmark M$ $= 69\%$ $\checkmark CA$	1MA adding all known% marks 1MA mean concept 1M changing the subject 1CA simplification  <b>OR/OF</b> 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;"><b>OR/OF</b></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><b>CA value of Y from 3.1.3</b></p> <p>1A numerator 1A denominator</p> <p>1CA simplification</p> <p style="text-align: center;"><b>OR/OF</b></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 <b>OR/OF</b> View <b>OR/OF</b> Terrace $\checkmark\checkmark RT$	2RT Reading from the map (2)	MP L2										
3.2.2	<p style="text-align: center;"><math>\checkmark\checkmark O</math></p> <p>Facing oncoming traffic/Sy gaan in aankomende verkeer vasry</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>One way road/Dit is 'n eenrigtingpad <math>\checkmark\checkmark O</math></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]	<p>1A measuring scale</p> <p>1A measuring distance 1M working with scale</p> <p>1CA answer</p> <p><b>NPR</b></p> <p style="text-align: right;">(4)</p>	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 <math>\checkmark\checkmark O</math></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.												
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												


Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
3.2.5 (b)	<p>From/Vanaf 12:00 - 15:25 = <math>(3 - 1) + \frac{25}{60}</math> ✓M ✓C</p> <p>= 2,4166666667 hours/uur ✓CA</p> <p>Rate per hour/Koers per uur = <math>\frac{£79,75}{2,4166666667}</math> ✓M</p> <p>= £33 ✓CA</p> <p style="text-align: center;"><b>OR/OF</b></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> <p>3 h 25 min – 1 h = 2 h 25 min ✓M ✓CA</p> <p>2h 25 min = 145 min ✓C</p> <p>Rate per hour/Koers per uur = <math>\frac{79,75 \times 60}{145}</math> ✓M</p> <p>= <math>\frac{4\,785}{145}</math></p> <p>= £33 ✓CA</p>	<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 <b>pound</b></p> <p style="text-align: center;"><b>OR/OF</b></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 <b>pound</b></p>	<p>F L3</p>
		(5)	<b>[39]</b>



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	<b>Person at D7:</b> <ul style="list-style-type: none"> <li>Turn left walk towards the corridor./<i>Draai links en loop na die gang.</i></li> <li>Turn right walk towards the stage./<i>Draai regs en loop na die verhoog.</i></li> <li>At end of the corridor turn left./<i>Aan die einde van die gang draai links.</i></li> <li>Walk towards the last seat in the front of section B./<i>Loop na die laastesitplek in afdeling B.</i></li> </ul>	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	<b>Collection/Insameling:</b> $\text{Adults/Volwassenes: } 150 \times \$28,60 = \$4\,290$ $\text{Students/Studente: } 57 \times \$26,40 = \$1\,504,80$ $\text{Kids/Kinders: } 33 \times \$17,60 = \$580,80$ 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;"><b>OR/OF</b></p> <p>Adults/volwassenes = <math>53 + 57 + 40 = 150</math>  <math>\checkmark</math> MA                      Cost/Koste = <math>\\$28,60 \times 150 = \\$4\,290</math> <math>\checkmark</math> MCA                      Cost excl VAT /Koste BTW uitgesluit = <math>\\$4\,290 \div 1,10 = \\$3\,900</math> <math>\checkmark</math> CA                      Students/Studente = <math>15 + 32 + 10 = 57</math>                      Cost/Koste = <math>\\$26,40 \times 57 = \\$1\,504,80</math>                      Cost excl VAT /Koste BTW uitgesluit = <math>\\$1\,504,80 \div 1,10 = \\$1\,368</math> <math>\checkmark</math> CA                      Children = <math>9 + 15 + 9 = 33</math>                      Cost/Koste = <math>\\$17,60 \times 33 = \\$580,80</math>                      Cost excl VAT /Koste BTW uitgesluit = <math>\\$580,80 \div 1,10 = \\$528</math> <math>\checkmark</math> CA                      Total/Totaal = <math>\\$3\,900 + \\$1\,368 + \\$528 = \\$5\,796</math> <math>\checkmark</math> MCA <math>\checkmark</math> CA                      The claim is correct/ Opmerking is <b>KORREK</b> <math>\checkmark</math> O</p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Section A/Afdeling A: <math>\checkmark</math> MA  <math>= 53 \times 28,60 + 15 \times 26,40 + 9 \times 17,60</math>  <math>= 1\,515,80 + 396,00 + 158,40 = 2\,070,20</math> <math>\checkmark</math> CA</p> <p>Section B/ Afdeling B:  <math>= 57 \times 28,60 + 32 \times 26,40 + 15 \times 17,60</math>  <math>= 1\,630,20 + 844,80 + 264,00 = 2\,739,00</math> <math>\checkmark</math> CA</p> <p>Section C/ Afdeling C:  <math>= 40 \times 28,60 + 10 \times 26,40 + 9 \times 17,60</math>  <math>= 1\,144,00 + 264,00 + 158,40 = 1\,566,40</math> <math>\checkmark</math> CA</p> <p>Total amount of Sections = <math>2\,070,20 + 2\,739,00 + 1\,566,40 = \\$6\,375,60</math> <math>\checkmark</math> MCA                      Excluding VAT/Sonder BTW = <math>\frac{\\$6\,375,60}{1,10} = \\$5\,796</math> <math>\checkmark</math> MCA <math>\checkmark</math> CA</p> <p><b>or/of</b>  <math>\\$5\,796 \times 1,1 = \\$6\,375,60</math> which equals total collection</p> <p>Claim is <b>CORRECT</b>/Opmerking is <b>KORREK</b> <math>\checkmark</math> O</p>	<p style="text-align: center;"><b>OR/OF</b></p> <p>1MA multiply tariff by relevant total patrons.                      1MCA dividing by 1,10                      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: center;"><b>OR/OF</b></p> <p>1MA multiply tariff by relevant total patrons.                      1CA amount</p> <p>1CA amount</p> <p>1CA amount</p> <p>1MCA total collection                      1MCA dividing by 1,10                      1CA amount excl. VAT</p> <p>1O conclusion</p>	



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

<p>4.2.1</p>	<p style="text-align: center;"><b>AUSTRALIAN INFLATION RATE FOR 2017 AND 2018</b></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	<p>L2 D</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																													
<p>4.2.2</p>	<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>1A correct month 1MCA subtracting values 1CA simplification</p> <p style="text-align: right;">(3)</p>	<p>L3 F</p>																																						
<p>4.2.3</p>	<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>	<p>F L4</p>																																						

Q/V	Solution/Oplissing	Explanation/Verduideliking	T&L
4.2.3	<p style="text-align: center;"><b>OR/OF</b></p> <p>Inflation Nov/<i>Inflasie Nov</i> = \$156 831,36 × 2,18%<sup>✓RT</sup> = \$3418,92</p> <p>Dec. cost of car /<i>Des koste</i> = \$ 156 831,36 + \$3418,92<sup>✓ MCA</sup> = \$ 160 250,28<sup>✓ CA</sup></p> <p>Inflation Dec/<i>Inflasie Des</i> = \$ 160 250,28 × 1,91 % = \$ 3 060,78<sup>✓ CA</sup></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<sup>✓ CA</sup></p> <p>He is incorrect/<i>Hy is NIE korrek NIE</i><sup>✓ O</sup></p> <p style="text-align: center;"><b>OR/OF</b></p> <p>December/ <i>Desember</i>: Cost of car/<i>Koste van motor</i> = \$156 831,36 × 102,18%<sup>✓ RT</sup> = \$160 250,28<sup>✓ MCA</sup></p> <p>January/<i>Januarie</i> Cost of car/<i>Koste</i> = \$ 160 250,28 × 101,91 % = \$ 163 311,06<sup>✓ CA</sup></p> <p>Increase/<i>Verhoging</i> = \$ 163 311,06 – \$156 831,36 = \$ 6 479,70<sup>✓ CA</sup></p> <p>He is incorrect/<i>Hy is verkeerd</i><sup>✓ O</sup></p> <p style="text-align: center;"><b>OR/OF</b></p> <p>Price in January /<i>Prys in Januarie</i> <sup>✓ RT ✓ MCA ✓ CA</sup> = AUD 156 831,36 × 1,0218 × 1,0191 = AUD 163 311,0641<sup>✓ CA</sup></p> <p>Increase/<i>Verhoging</i> = AUD 163 311,06 – AUD 156 831,36 = AUD 6 479,70<sup>✓ CA</sup></p> <p>Incorrect/ <i>Nie korrek nie</i><sup>✓ O</sup></p>	<p style="text-align: center;"><b>OR/OF</b></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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;"><b>OR/OF</b></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]	
	<b>TOTAL/TOTAAL:150</b>		