<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Method</td>
</tr>
<tr>
<td>MA</td>
<td>Method with accuracy</td>
</tr>
<tr>
<td>CA</td>
<td>Consistent accuracy</td>
</tr>
<tr>
<td>A</td>
<td>Accuracy</td>
</tr>
<tr>
<td>C</td>
<td>Conversion</td>
</tr>
<tr>
<td>S</td>
<td>Simplification</td>
</tr>
<tr>
<td>RT/RG</td>
<td>Reading from a table/Reading from a graph</td>
</tr>
<tr>
<td>SF</td>
<td>Correct substitution in a formula</td>
</tr>
<tr>
<td>O</td>
<td>Opinion/Example</td>
</tr>
<tr>
<td>P</td>
<td>Penalty, e.g. for no units, incorrect rounding off etc.</td>
</tr>
<tr>
<td>R</td>
<td>Rounding off</td>
</tr>
</tbody>
</table>

This memorandum consists of 18 pages.
QUESTION 1 [33 MARKS]

ANSWER ONLY: If totally correct – Full marks; Otherwise 0

No penalties if units of measurement are omitted

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
</table>
| 1.1.1 (a) | $15.43 + 46.08 \times 15.6875$

\[= 15.43 + 722.88\]

\[= 738.31\] CA

1A multiplying

1CA simplifying

NO MARKS – If order of operation is incorrect

| 1.1.1 (b) | \(\frac{17 - 5}{3} \times (29.35 - 10.63) = \frac{12}{3} \times 18.72\)

\[= 74.88\] CA

1A simplifying both the bracket and fraction

1CA simplifying

NO penalty for rounding

| 1.1.2 | \(2.875 = \frac{2875}{1000}\)

\[= \frac{7}{8}\] OR \(\frac{23}{8}\)

1M Changing from decimal to fraction form

1A simplified fraction

No marks if \(\frac{1000}{2875}\) used.

| 1.1.3 | ZAR 110.35

\[= 110.35 \times 9.48 \text{ DZD}\]

\[= 1046.118 \text{ DZD OR 1046.12 DZD}\] A

1M multiplication

1A amount in dinar

No rounding off penalties

Max 1 mark if given in rand

(2)
### Ques | Solution | Explanation | AS
---|---|---|---
1.1.4 | 3 024 cm = 3 024 ÷ 100 m ✓M  
= 30,24 m ✓A | 1M division by 100  
1A correct simplification  
No penalty if incorrect units are given | 12.3.2

1.1.5 | 6\(\frac{1}{4}\) % of 420 000  
= 6,25 \(\frac{M}{100}\) \(\times\) 420 000  
= 0,0625 \(\times\) 420 000  
= 26 250 ✓A  
OR  
6\(\frac{1}{4}\) % of 420 000 = \(\frac{25}{4}\) % of 420 000 ✓M  
= \(\frac{25}{400}\) \(\times\) 420 000  
= 26 250 ✓A | 1M multiplication with correct percentage  
1A correct simplification  
Do not accept 630 000 | 12.1.1

1.1.6 | Percentage Profit = \(\frac{R1 840 - R1 150}{R1 150}\) \(\times\) 100% ✓M  
= 60% OR 0,6 OR \(\frac{60}{100}\) ✓A | 1M correct substitution  
1A percentage profit  
No marks for – 37,5%  
Max 1 mark for – 60% | 12.1.3

1.2.1 | 21 ✓A | 1A number of classes | 12.1.1

1.2.2 | 3 learners ✓✓A | 2A mode | 12.4.3

1.2.2 (a) | 3 learners ✓✓A | 2A median | 12.4.3

1.2.2 (b) | 3 learners ✓✓A | 2A median | 12.4.3
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
</table>
| 1.3.1 | Volume = 50 cm × 40 cm × 45 cm \(\checkmark\) M  
\[= 90000 \text{ cm}^3\] \(\checkmark\) CA | 1M substituting correct values  
1CA volume | 12.3.1 |
| 1.3.2 | Height of liquid = \(\frac{3000 \text{ cm}^3}{50 \text{ cm} \times 40 \text{ cm}}\) \(\checkmark\) M/A  
\[= 1 \frac{1}{2} \text{ cm} \quad \text{OR} \quad 1.5 \text{ cm} \quad \text{OR} \quad 3 \frac{3}{2} \text{ cm}\] | 1M/A accurate substitution  
1A simplification | 12.3.1 |
| 1.4.1 | Daily payment = R12,50 × \(\frac{4}{18}\) \(\checkmark\) S  
\[= R 106,25 \quad \checkmark\) CA  
\quad \text{OR} \] | 1S substitution  
1CA simplification | 12.2.1 |
|  | Daily payment = R12,50 × 8 + \(\frac{R12,50}{2}\) \(\checkmark\) S  
\[= R 106,25 \quad \checkmark\) CA  
\quad \text{OR} \] | Max 1 mark if rounded off  
to 9 hours | 12.2.1 |
|  | Daily payment = (R12,50 × 8) + (R12,50 ÷ 2)  
\[= R 100 + R6,25\]  
\[= R 106,25 \quad \checkmark\) CA | 12.2.1 |
| 1.4.2 | Number of hours worked = \(\frac{R 218,75}{R12,50}\) \(\checkmark\) M  
\[= 17.5 \quad \text{or} \quad 17 \frac{1}{2} \quad \checkmark\) A | 1M dividing by correct values  
1A simplification | 12.1.1 |
| 1.5.1 | 10 hours \(\checkmark\) A | 2A reading from graph | 12.2.3 |
| 1.5.2 | 5 \(\checkmark\) A | 2A reading from graph | 12.2.3 |
| 1.5.3 | 7 hours and 30 minutes \(\checkmark\) A  
\quad \text{OR} \] | 2A correct number of hours  
Accept any time between 7  
and 8 hours | 12.2.3 |
|  | \(7.5 \text{ hrs}\) \(\checkmark\) A | 12.2.3 | [33] |
**QUESTION 2 [33 MARKS]**

**ANSWER ONLY:** If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
</table>
| 2.1.1 (a) | Lateral surface area of the cylindrical holder  

\[= 2 \times 3,14 \times 5 \times 15 \text{ cm} \]  
\[= 471 \text{ cm}^2 \]  
✓ SF  
✓ A |  
1SF substitution of correct radius and height  
1A total surface area  
Accept 471,24 cm² or 471,43 cm² | 12.3.1 |
| 2.1.1 (b) | Lateral surface area of the rectangular holder  

\[= 2 \times (8 + 10) \times 15 \text{ cm} \]  
\[= 2 \times 18 \times 15 \text{ cm} \]  
✓ S  
✓ CA |  
1SF substitution  
1S correct addition  
1CA total surface area in cm²  
Max 1 mark if incorrect formula is used  
Penalty if units omitted | 12.3.1 |
| 2.2.1 | 33 minutes ✓ RG |  
1RG correct reading | 12.2.3 |
| 2.2.2 | 6 minutes ✓ ✓ RG |  
2RG correct reading | 12.2.3 |
| 2.2.3 | 12 minutes – 6 minutes ✓ RT  

\[= 6 \text{ minutes} \]  
✓ A |  
1RT correct values from the table  
1A correct minutes | 12.2.3 |
| 2.2.4 | 2 500 m ✓ ✓ RG |  
2RG correct reading  
Accept any value greater than 0 up to and including 3 000 m | 12.2.3 |
| 2.2.5 | 27 minutes ✓ ✓ RG |  
2RG correct reading | 12.2.3 |
### Ques | Solution | Explanation | AS
--- | --- | --- | ---
2.2.6 | 10:55 + 12 minutes 1M adding 1A solution = 11:07 √A | Max 1 mark if given as 10:67 | 12.3.1
2.2.7 | Average speed = $\frac{\sqrt{A} 3000\text{ m}}{6\text{ min}}$ 1A correct distance 1A correct time 1CA simplifying = 500 m/min √CA | 2 marks if using 1000 m No penalty if units omitted. Max 2 marks if answer in km/h | 12.2.1
2.3.1 | 47,1 % – 42,7% 1RT correct values selected 1CA percentage decrease = 4,4 % √CA | Accept – 4,4% No penalty if % is omitted | 12.1.1 12.4.4
**ANSWER ONLY: If totally correct – Full marks; Otherwise 0**

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
</table>
| 2.3.2 (a) | **A = \[
\frac{4720000}{10,0\%} \quad \text{OR} \quad \frac{4720000}{0,10} \quad \checkmark \text{M} \quad \checkmark \text{RT}
\]
\[
= 47200000 \quad \checkmark \text{CA}
\]

**OR**

10,0% of the population is 4 720 000 \checkmark \text{RT}

\[
\therefore 1\% \text{ of the population is } \frac{4720000}{10,0\%} \quad \checkmark \text{M}
\]

\[
\therefore 100\% \text{ of the population is } \frac{4720000}{10,0\%} \times 100\%
\]

\[
= 47200000 \quad \checkmark \text{CA}
\]

**OR**

10% of the population is 4 720 000 \checkmark \text{RT}

100% of the population = 10 \times 4 720 000 \quad \checkmark \text{M}

\[
= 47200000 \quad \checkmark \text{CA}
\]

(3)  

| 2.3.2 (b) | **B = 45,0\% \times 621 600 \quad \checkmark \text{M} \quad \checkmark \text{RT}
\]

\[
= 0,450 \times 621 600
\]

\[
= 279 720
\]

\[
\approx 279 700 \quad \checkmark \text{CA}
\]

1M method
1RT correct values selected 12.1.1
1CA rounded to nearest hundred 12.4.4

(3)  

| 2.3.2 (c) | **C = \[
\frac{5060000}{48653800} \times 100 \quad \checkmark \text{RT}
\]

\[
= 10,40000987
\]

\[
\approx 10,4 \quad \checkmark \text{CA}
\]

2RT correct values selected 12.1.1
1CA rounded to 1 decimal place 12.4.4

No penalty if given as 10,4% (3)
### Ques 2.3.3

<table>
<thead>
<tr>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 320 500 : 5 210 000 ✓RT</td>
<td>1RT reading correct values</td>
<td>12.1.11 2.4.4</td>
</tr>
<tr>
<td>= 1 : (\frac{5 210 000}{49 320 500}) ✓M</td>
<td>1M correct ratio</td>
<td></td>
</tr>
<tr>
<td>= 1 : 0,105 635 5</td>
<td>1CA simplifying ratio</td>
<td></td>
</tr>
<tr>
<td>≈ 1 : 0,1 ✓CA</td>
<td>rounded to one decimal place</td>
<td></td>
</tr>
</tbody>
</table>

Max 2 marks if order is changed and the answer is 1 : 9,5

Max 1 mark if written as a fraction

(3) [33]
**QUESTION 3 [19 MARKS]**

**ANSWER ONLY:** If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1</td>
<td>R25 460 000 000 + R22 670 000 000 + R22 074 000 000 + R25 458 000 000 + R26 978 000 000</td>
<td>1M adding correct values 1A simplifying to the correct value</td>
<td>12.4.4 12.1.1</td>
</tr>
<tr>
<td></td>
<td>= R122 640 000 000 or R122 640 million</td>
<td>Max 1 for R 1 599 565 000 000 or R1 599 565 million Penalty of 1 mark if million left out in either 3.1.1 or 3.1.2</td>
<td></td>
</tr>
<tr>
<td>3.1.2</td>
<td>R 273 127 million R 292 079 million R 314 927 million R 326 385 million R 393 047 million</td>
<td>1M arrangement in ascending order 1A correct values</td>
<td>12.4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Penalty of 1 mark if million left out in either 3.1.1 or 3.1.2 NO marks for descending order</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Max 1 mark if incorrect column values are arranged</td>
<td></td>
</tr>
</tbody>
</table>

Copyright reserved
### Ques 3.1.3

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>8,1 %</td>
<td>8,3 %</td>
<td>7,6 %</td>
<td>7,8 %</td>
<td>6,9 %</td>
</tr>
</tbody>
</table>

**AGRICULTURAL EXPORTS AS A PERCENTAGE OF THE TOTAL EXPORTS**

- **5A one for each correct bar**
- **Do NOT penalise if no gaps between bars**
- **Do NOT penalise if the spaces between bars are uneven and the bar widths are unequal**
- **Maximum of 3 marks if a line graph is drawn**
- **Bars can also be represented as vertical lines**

---

### OR

**AGRICULTURAL EXPORTS AS A PERCENTAGE OF THE TOTAL EXPORTS**

---

(5)
### ANSWER ONLY: If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1</td>
<td>$450,000,m^2 = \frac{450,000}{10,000},ha$ ✓M   [45,ha] ✓A</td>
<td>1M division by 10,000</td>
<td>12.3.2</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$10,000,m^2 = 1ha$</td>
<td>1M concept</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Therefore $450,000,m^2 = 45\times10,000,m^2$ ✓M</td>
<td>1A number of hectares</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$= 45,ha$ ✓A</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>3.2.2</td>
<td>Number of hectares = $\frac{5000}{0,65},ha$ ✓M</td>
<td>1M dividing</td>
<td>12.1.1 12.2.1</td>
</tr>
<tr>
<td></td>
<td>$= 7,692,3,ha$ ✓A</td>
<td>1A number of hectares</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\approx 7,692,ha$ ✓CA</td>
<td>1CA rounding off</td>
<td></td>
</tr>
<tr>
<td>3.2.3</td>
<td>Fertiliser needed $= 4,32 \times 2,000,kg$ ✓M✓A</td>
<td>2 M/A multiplication with correct values</td>
<td>12.1.1 12.2.1</td>
</tr>
<tr>
<td></td>
<td>$= 8,640,kg$ ✓CA</td>
<td>1CA simplifying</td>
<td></td>
</tr>
<tr>
<td>3.2.4</td>
<td>$\frac{0,65}{4,32} \times \frac{100%}{1}$ ✓M</td>
<td>1M concept</td>
<td>12.1.1</td>
</tr>
<tr>
<td></td>
<td>$= 15,046%$ ✓OR $\approx 15,05%$ ✓A</td>
<td>1A solution</td>
<td></td>
</tr>
</tbody>
</table>

| Total   |                | [19]                            |     |
## QUESTION 4 [19 MARKS]

**ANSWER ONLY:** If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1</td>
<td>Increasing ✓✓A</td>
<td>2A type of function</td>
<td>12.2.1</td>
</tr>
<tr>
<td>4.1.2</td>
<td>32°F ✓✓RG</td>
<td>2RG correct reading</td>
<td>12.2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accept 31°F to 33°F</td>
<td>12.2.3</td>
</tr>
<tr>
<td>4.1.3</td>
<td>40°C ✓✓RG</td>
<td>2RG correct reading</td>
<td>12.2.3</td>
</tr>
<tr>
<td>4.1.4</td>
<td>21°F ✓✓RG ✓R</td>
<td>2RG correct reading</td>
<td>12.2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1R rounding</td>
<td>12.2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accept 22°F</td>
<td>12.2.3</td>
</tr>
<tr>
<td>4.1.5</td>
<td>Range = 17°C – (–2°C) ✓✓A</td>
<td>1M calculating the range</td>
<td>12.2.3</td>
</tr>
<tr>
<td></td>
<td>= 17°C + 2°C</td>
<td>1A correct values</td>
<td>12.1.2</td>
</tr>
<tr>
<td></td>
<td>= 19°C ✓CA</td>
<td>1CA range</td>
<td>12.4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>max of 2 marks if:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>–19°C or</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15°C or</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>from –2°C to 17°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>or [–2°C ; 17°C]</td>
<td></td>
</tr>
<tr>
<td>4.2.1</td>
<td>Total Entrance fee ✓✓A</td>
<td>2A substitution of correct values</td>
<td>12.2.1</td>
</tr>
<tr>
<td></td>
<td>= (4 + 5) × R3,50 + 10 × R6,50</td>
<td></td>
<td>12.1.1</td>
</tr>
<tr>
<td></td>
<td>= R31,50 + R65,00</td>
<td>1CA solution</td>
<td>12.2.3</td>
</tr>
<tr>
<td></td>
<td>= R96,50 ✓CA</td>
<td></td>
<td>12.3.1</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Perimeter = 3,14 × 5 m ✓SF</td>
<td>1SF substitution</td>
<td>12.3.1</td>
</tr>
<tr>
<td></td>
<td>= 15.7 m ✓A</td>
<td>1A simplifying</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accept 15.71 m or 15,714 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No marks if diameter is not 5 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No penalty for omitting units</td>
<td></td>
</tr>
<tr>
<td>Ques</td>
<td>Solution</td>
<td>Explanation</td>
<td>AS</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>-------------</td>
<td>----</td>
</tr>
<tr>
<td>4.2.3</td>
<td>$6000 , \ell = \frac{6000}{4.546} \text{ gallons } \checkmark \text{M} \approx 1319.84 \text{ gallons } \checkmark \text{A}$</td>
<td>1 M dividing</td>
<td>12.3.2</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>1A number of gallons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1 , \ell = \frac{1}{4.546} \text{ gallon}$ $6000 , \ell = \frac{1}{4.546} \times 6000 \text{ gallons } \checkmark \text{M} \approx 1319.84 \text{ gallons } \checkmark \text{A}$</td>
<td>Accept up to 1320 gallons</td>
<td></td>
</tr>
</tbody>
</table>

[19]
### QUESTION 5 [22 MARKS]

**ANSWER ONLY:** If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1</td>
<td>South Westerly ✓ A OR SW OR SSW OR WS OR S45ºW OR West of South OR South of West</td>
<td>1A direction</td>
<td>12.3.4</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Perimeter of Mr Khoso’s plot: ✓ A ✓ M = 224 m + 200 m + 150 m + 200 m + 250 m = 1 024 m ✓ CA</td>
<td>1M Concept of perimeter 1A using correct values 1CA sum of the lengths</td>
<td>12.3.1</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Volume = 3,14 × (10 m)² × 2 m ✓ SF = 628 m³ ✓ A ✓ A</td>
<td>1SF substitution 1A simplifying 1A correct units</td>
<td>12.3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accept 628,32 m³ OR 628,57 m³ Max 1mark if radius not squared</td>
<td></td>
</tr>
<tr>
<td>5.1.4</td>
<td>Area of a cattle kraal = ( \frac{1}{2} \times 200 \text{ m} \times 200 \text{ m} ) ✓ SF = 20 000 m² ✓ CA</td>
<td>1A height 1SF substitution 1CA simplifying</td>
<td>12.3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Max 2 marks if area is equal to 22 400 m²</td>
<td></td>
</tr>
</tbody>
</table>
### ANSWER ONLY: If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
</table>
| 5.1.5 | Area of Mr Khoso’s plot<br>
\[
\text{Area} = \frac{1}{2} \times (200 \text{ m} + 150 \text{ m} + 250 \text{ m}) \times 200 \text{ m}
\]
\[
= \frac{1}{2} \times 600 \text{ m} \times 200 \text{ m}
\]
\[
= 60,000 \text{ m}^2
\]

**OR**

\[
\text{Area} = \text{Area of triangle} + \text{Area of trapezium}
\]
\[
\frac{1}{2} \times 200 \text{ m} \times 200 \text{ m} + \frac{1}{2} \times (150 \text{ m} + 250 \text{ m}) \times 200 \text{ m}
\]
\[
= 20,000 \text{ m}^2 + 40,000 \text{ m}^2
\]
\[
= 60,000 \text{ m}^2
\]

1A adding correct parallel sides <br>1SF substitution <br>1A correct values <br>1CA simplifying <br>Max 2 marks if area of vegetable garden is calculated as 5 625 m²

| 5.2.1 | Total mass = 2 × 2 kg + 12 × 0,12 kg <br>
\[
\text{Total mass} = 4 \text{ kg} + 1,44 \text{ kg}
\]
\[
= 5,44 \text{ kg}
\]

1M multiplying and adding <br>1A simplifying <br>12.3.1 <br>12.2.1

| 5.2.2 (a) | A = 2 × 12 <br>
\[
\text{A} = 24
\]

1M multiplying <br>1A number of carrots <br>12.2.1

**OR**

\[
\text{A} = 4 \times 6 <br>
\]
\[
\text{A} = 24
\]
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
</table>
| 5.2.2 (b) | 2 cabbages in 1 box  
24 cabbages in \( \frac{24}{2} \) boxes ✓ M  
\[ = 12 \text{ boxes} \] ✓ A  
OR  
\[ B = \frac{144}{12} \] ✓ M  
\[ B = 12 \text{ boxes} \] ✓ A  
OR  
1 box = 14 vegetables  
\[ B = \frac{168}{14} \] ✓ M  
\[ = 12 \] ✓ A  
OR  
\[ B = \frac{5 \times 24}{10} \] ✓ M  
\[ = 12 \] ✓ A | 1M dividing correct values  
1A number of boxes | 12.2.1 |
| 5.2.3 | 12 cabbages in 6 boxes ✓ M  
Number of carrots = \( 6 \times 12 \)  
\[ = 72 \] ✓ CA  
OR  
5 boxes have 10 cabbages and 60 carrots  
1 box has 2 cabbages and 12 carrots  
\[ \therefore (60 + 12) \text{ carrots} = 72 \text{ carrots} \] ✓ CA | 1M number of boxes  
1CA number of carrots  
1M both statements  
1CA number of carrots | 12.2.1 |
# QUESTION 6 [24 MARKS]

**ANSWER ONLY:** If totally correct – Full marks; Otherwise 0

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1.1</td>
<td>Mean [ \frac{25 + 55 + 37 + 34 + 37 + 37 + 46 + 37 + 37 + 40 + 33 + 37 + 37 + 40}{14} ] [ = \frac{532}{14} ] [ = 38 ]</td>
<td>1M sum 1M dividing the sum of scores 1A simplifying</td>
<td>12.4.3</td>
</tr>
<tr>
<td>6.1.2</td>
<td>[ P(37 \text{ key rings}) = \frac{7}{14} ] [ = \frac{1}{2} ]</td>
<td>1A correct numerator 1A correct denominator 1CA simplified fraction Max 2 marks for 50% or 0.5</td>
<td>12.4.5 12.1.1</td>
</tr>
<tr>
<td>6.1.3</td>
<td>(a) Range = 38 – 25 [ = 13 ] coffee mugs</td>
<td>1A minimum &amp; maximum values 1A range Accept –13 Max 1 mark if key rings used</td>
<td>12.4.3</td>
</tr>
<tr>
<td>(b)</td>
<td>Mode = 35 and 37</td>
<td>2A mode</td>
<td>12.4.3</td>
</tr>
<tr>
<td>(c)</td>
<td>Median = [ \frac{35 + 35}{2} ] [ = 35 ]</td>
<td>1M finding median 1A median (one value only)</td>
<td>12.4.3</td>
</tr>
<tr>
<td>6.2.1</td>
<td>Income = 128 \times R7,00 [ = R896,00 ]</td>
<td>1M calculating income 1CA income</td>
<td>12.1.3</td>
</tr>
</tbody>
</table>

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6.2.2 (a) NOTE: To assist with marking, the graph that the learner has to draw is represented as a dotted line. The learners DO NOT have to draw a dotted line.

INCOME FROM ITEMS SOLD DURING THE THIRD WEEK

Day of week

Income (in rand)

A plotting (1;250) 1A plotting (3;370) 1A plotting (4;380)
1A plotting (2;350) 1A plotting (5;270) 1A plotting (6;350)
1A plotting (7;370)
1CA joining the points with a line

Max 6 marks if incorrect type of graph is drawn

(8)

6.2.2 (b) Day 2  ✔ ✔ RG/RT

2RG/RT correct days  12.4.4

(2)

TOTAL: 150