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**Implementation**: The following examples illustrate correct use of the follow through process in straightforward situations.

Question: An investment problem with two different rates of interest and a total amount of $600 split across the rates in consecutive periods:

<table>
<thead>
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<th>Markscheme</th>
<th>Candidate’s Script</th>
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<tbody>
<tr>
<td>(a) $600 \times 1.02 \hspace{1cm} (M1)$</td>
<td>Final amount after 1\textsuperscript{st} period = $600 \times 1.02 = $602 \hspace{1cm} (M1) \hspace{1cm} (A0)</td>
<td></td>
</tr>
<tr>
<td>OR answer only \hspace{1cm} (G2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) $\left(\frac{612}{2} \times 1.02\right) + \left(\frac{612}{2} \times 1.04\right) \hspace{1cm} (M1)$</td>
<td>Amount after 2\textsuperscript{nd} period = $301 \times 1.02 + 301 \times 1.04 = $620.06 \hspace{1cm} (M1) \hspace{1cm} (A1)(ft)</td>
<td></td>
</tr>
<tr>
<td>OR answer only \hspace{1cm} (G1)</td>
<td>but note</td>
<td></td>
</tr>
</tbody>
</table>

*Note: The (M1) is for splitting the value from (a) and forming a sum of products.*

Here the (ft) indicates a possible follow through from part (a).

Case (i)

(a) Final amount after 1\textsuperscript{st} period = $600 \times 1.02 = $602 \hspace{1cm} (M1) \hspace{1cm} (A0)

OR answer only \hspace{1cm} (G2)

(b) Amount after 2\textsuperscript{nd} period = $301 \times 1.02 + 301 \times 1.04 = $620.06 \hspace{1cm} (M1) \hspace{1cm} (A1)(ft)

but note

Case (ii)

an (M0) almost always prohibits the associated (ft) so

(a) $600 \times 1.02 = $602 \hspace{1cm} (M1)(A0)

(b) $602 \times 1.04 = $626.08 \hspace{1cm} (M1)(A0)(ft)

Case (iii)

(a) $600 \times 1.02 = $602 \hspace{1cm} (M1)(A0)

(b) No working. 620.06 given as answer. \hspace{1cm} (G0)(ft)

Case (iv)

(a) $612 \hspace{1cm} (G2)

(b) $630.36 \hspace{1cm} (G1)
8 Graphic Display Calculators

Candidates will often be obtaining solutions directly from their calculators. They must use mathematical notation, not calculator notation. No method marks can be awarded for incorrect answers supported only by calculator notation. The comment ‘I used my GDC’ cannot receive a method mark.
Question 1 continued

(A1) for correct scales and labels
(A3) for all ten points plotted correctly
(A2) for eight or nine points plotted correctly
(A1) for six or seven points plotted correctly

Note: Award at most (A0)(A3) if axes reversed.

(b) (i) \( \bar{x} = 42 \) (A1)
(ii) \( \bar{y} = 64 \) (A1) [2 marks]

(c) \((\bar{x}, \bar{y})\) plotted on graph and labelled, M (A1)(ft)(A1) [2 marks]

Note: Award (A1)(ft) for position, (A1) for label.

(d) \(-0.998\) (G2) [2 marks]

Note: Award (G1) for sign, (G1) for correct absolute value.

(e) line on graph (A1)(ft)(A1) [2 marks]

Notes: Award (A1)(ft) for line through their M, (A1) for approximately correct intercept (allow between 83 and 85). It is not necessary that the line is seen to intersect the y-axis. The line must be straight for any mark to be awarded.

(f) \( y = -0.470(25) + 83.7 \) (M1)

Note: Award (M1) for substitution into formula or some indication of method on their graph. \( y = -0.470(25) + 83.7 \) is incorrect.

\[ y = 72.0 \text{ (accept 71.95 and 72)} \] (A1)(ft)(G2) [2 marks]

Note: Follow through from graph only if they show working on their graph. Accept \( 72 \pm 0.5 \).

(g) Yes since 25% lies within the data set and \( r \) is close to -1 (R1)(A1) [2 marks]

Note: Accept Yes, since \( r \) is close to -1

Note: Do not award (R0)(A1).

Total [16 marks]