

1.3 *The first answer not given to two decimal places is not awarded the final (A1). Incorrect rounding is not penalized thereafter.*

(a) 37500×0.7234 (M1)
 $= 27127.50$ (A1)(G2) [2 marks]

(b) 6947.50 (A1)(ft)(G1) [1 mark]

Note: Follow through from part (a) irrespective of whether working is seen.

(c) $\frac{6947.50 \times 4.5 \times 4}{100} + 6947.50$ (M1)(M1)

Note: Award (M1) for their correctly substituted simple interest formula, (M1) for addition of their part (b).

$= 8198.05$ (A1)(ft)(G2) [3 marks]

Note: Follow through from part (b).

(d) 27127.50×0.91 (A1)(M1)

Note: Award (A1) for 0.91 seen or equivalent, (M1) for their 27 127.50 multiplied by 0.91

OR

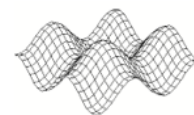
$27127.50 - 0.09 \times 27127.50$ (A1)(M1)

Note: Award (A1) for 0.09×27127.50 seen, and (M1) for $27127.50 - 0.09 \times 27127.50$.

$= 24\,686.03$ (A1)(ft)(G2) [3 marks]

Note: Follow through from part (a).

continued...



Question 1.3 continue

(e) $27127.50 \times \left(1 - \frac{9}{100}\right)^4$ (MI)(AI)(ft)

Notes: Award (MI) for substituted compound interest formula, (AI)(ft) for correct substitution. Follow through from part (a).

OR

$27127.50 \times (0.91)^4$ (MI)(AI)(ft)

Notes: Award (MI) for substituted geometric sequence formula, (AI)(ft) for correct substitution. Follow through from part (a).

OR (lists (i))

24686.03, 22464.28..., 20442.50..., 18602.67... (MI)(AI)(ft)

Notes: Award (MI) for at least the 2nd term correct (calculated from their (a) $\times 0.91$). Award (AI)(ft) for four correct terms (rounded or unrounded). Follow through from part (a). Accept list containing the last three terms only (24686.03 may be implied).

OR (lists(ii))

$27127.50 - (2441.47... + 2221.74... + 2021.79... + 1839.82...)$ (MI)(AI)(ft)

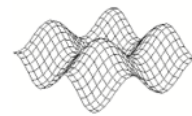
Notes: Award (MI) for subtraction of four terms from 27127.50. Award (AI) for four correct terms (rounded or unrounded). Follow through from part (a).

$= 18602.67$
 $= 18600$

(AI)
 (AG) [3 marks]

Note: The final (AI) is not awarded unless both the unrounded and rounded answers are seen.

continued...



Question 1.3 continued

(f) $\frac{18600 + 8198.05}{0.8694} - 30500$ (M1)(M1)(M1)

Note: Award (M1) for their answer to part (c) added to 18 600,
 (M1) for $\frac{18600 + (\text{any value})}{0.8694}$, (M1) for the *difference*
 between $\frac{18600 + (\text{any value})}{0.8694}$ and 30 500.

OR

$\frac{18600 + 8198.05 - 30500 \times 0.8694}{0.8694}$ (M1)(M1)(M1)

Note: Award (M1) for their answer to part (c) added to 18 600,
 (M1) for *difference* between (their answer to part (c) added to
 18 600) and (30500×0.8694) , (M1) for dividing the resultant
 value by 0.8694.
 If the value for the exchange rate used is 0.7234, then award,
 at most, (M1)(M0)(M1).

$= 323.61$ (A1)(ft)(G3) [4 marks]

Note: Follow through from their part (c).
 Award (A1)(ft) for final answer provided it is positive, and
 dependant on all three method marks.

Total: [16 marks]