Spreadsheets/digital models

6 questions | 14 marks

Equivalent correct methods earn the corresponding marks.

1. Write the closing formula for row 7 using columns B = opening, C = decimal rate and D = end deposit. [2 marks]

All inputs must use row 7.

Answer: E7 = B7*(1+C7)+D7

2. A row has opening 600, rate 0.03 and end deposit 40. Find the close. [2 marks]

$600(1.03) + 40 = 658$.

Answer: 658 dollars

3. Carry that close to the next opening and use the same rate and deposit. Find the next close. [2 marks]

$658(1.03) + 40 = 717.74$.

Answer: 717.74 dollars

4. For a loan with interest first and end repayment in column D, write the row-2 close formula. [2 marks]

Add the interest, then subtract the repayment.

Answer: E2 = B2*(1+C2)-D2

5. Why is B2*(1+C2+D2) wrong when D2 is a deposit in dollars? [3 marks]

The deposit belongs outside: B2*(1+C2)+D2.

Answer: It adds an amount of money to a dimensionless multiplier.

6. A spreadsheet shows two decimal places, so its author assumes it is correct. Describe a stronger check. [3 marks]

Number formatting only changes the display; the formula still needs independent verification.

Answer: Recalculate a row and check references and timing.