Practice worksheet | Percentages and financial mathematics

Modelling and checking financial problems with digital tools

Name: _____ Date: _____

6 questions | 14 marks

1. A savings model starts at 80 AUD. Weekly income is 15 AUD and spending is 9 AUD. Find the balance after five weeks. [2 marks]

2. Columns B, C and D contain opening balance, income and spending. Write a spreadsheet formula for closing balance E2. [2 marks]

3. A row has $B2 = 200$, $C2 = 25$ and $D2 = 17$. A formula displays 242. Check the row and give the correct closing balance. [2 marks]

4. Compare two alternative six-week plans, each starting with 150 AUD. In Plan A, the net weekly gain is 10 AUD. In Plan B, weekly spending is 4 AUD higher than in Plan A while income is unchanged. Find the balance after six weeks under each plan. [3 marks]

5. Use a simple-interest model for 300 AUD at 5% per year for three years. Find interest and final balance. [2 marks]

6. A model predicts a 400 AUD balance after saving 20 AUD weekly for ten weeks from a 200 AUD start. State two assumptions and explain how an unplanned 35 AUD expense changes the prediction. [3 marks]