Practice worksheet | Financial mathematics

Savings/loan scenarios with supplied models

Name: _____ Date: _____

6 questions | 16 marks

1. Use $B_{n+1} = 1.04B_n + 50$ from $B_0 = 200$. Find B_1. [2 marks]

2. Continue that model to its second close. [2 marks]

3. Use $L_{n+1} = 1.02L_n - 100$ from $L_0 = 600$. Find two closes. [3 marks]

4. A 100-dollar deposit is made before 5% interest on 1000 dollars. Compare with an end deposit. [3 marks]

5. A 2000-dollar opening loan balance gains 1% interest, then a 300-dollar payment is made. How much does the amount owed fall below its original value? [3 marks]

6. Why does repayment before interest need a different formula? [3 marks]