Practice worksheet | Exponentials and logarithms

Compound growth, depreciation and half-life

Name: _____ Date: _____

6 questions | 14 marks

1. Find 5000 dollars compounded annually at 4% for 3 years. [2 marks]

2. A 20,000 dollar asset loses 15% yearly. Find its value after 3 years. [2 marks]

3. Write a model for a 96 g sample with a 5-day half-life. [2 marks]

4. For the previous sample, find the mass after 15 days. [2 marks]

5. An account earns 1% each month. Find its effective annual percentage rate. [3 marks]

6. A saver adds 100 dollars at the end of every month. Explain why $Pb^{\text{number of months}}$ does not describe the whole account balance. [3 marks]