Practice worksheet | Linear and exponential models

Growth/decay models

Name: _____ Date: _____

6 questions | 14 marks

1. Write a model for 600 increasing by 8% per year. [2 marks]

2. A machine worth 20000 dollars depreciates 10% annually. Find its value after 3 years. [2 marks]

3. A quantity reaches 864 after two steps of 20% growth. Find its start. [2 marks]

4. A quantity starts at 40 and doubles every 3 h. Find it after 9 h. [2 marks]

5. A quantity changes from 500 to 320 over two equal steps. Find its positive step factor and percentage decrease. [3 marks]

6. Use a scientific calculator to find when $100(1.1)^t$ reaches 150. Give continuous time and first whole interval. [3 marks]