Practice worksheet | Linear and exponential models

Comparing linear with exponential change

Name: _____ Date: _____

6 questions | 13 marks

1. Classify 40, 50, 60, 70 and give a rule starting at $n = 0$. [2 marks]

2. Classify 40, 60, 90, 135 and give a rule. [2 marks]

3. Compare $A = 300 + 30t$ and $B = 300(1.08)^t$ at $t = 2$. [2 marks]

4. Find the differences for 100, 110, 121, 133.1 and identify its change. [2 marks]

5. One tank loses 4 L/min; another loses 4% of its current volume per minute. Identify the model types. [2 marks]

6. Why might neither an unrestricted linear nor an exponential model describe a population indefinitely? [3 marks]