Practice worksheet | Linear equations and graphs

Interpreting linear models

Name: _____ Date: _____

6 questions | 16 marks

1. A delivery service uses $C = 8 + 2d$ dollars for distance d km. Find C when $d = 7$. [2 marks]

2. For $C = 8 + 2d$, explain the intercept and gradient. [2 marks]

3. A tank follows $V = 150 - 5t$ L. Find when it empties and give a practical time domain. [3 marks]

4. A club charges 40 dollars for membership plus 6 dollars per session. Write a cost rule and find the cost of 8 sessions. [3 marks]

5. A plant is 12 cm high at day 0 and 18 cm high at day 3. Assuming linear growth, predict day 5 and state one limitation. [4 marks]

6. A bus-hire model is $C = 120 + 5p$, where p is the passenger count and the bus has 24 seats. Explain why $p = 30$ is not allowed. [2 marks]