Practice worksheet | Linear and exponential models

Simultaneous equations and break-even situations

Name: _____ Date: _____

6 questions | 13 marks

1. Solve $y = 2x + 1$ and $y = 5x - 8$. [2 marks]

2. Plans cost $10 + 4h$ and $22 + 2h$ dollars. Find equal usage and cost. [2 marks]

3. Explain the solutions of $y = 3x + 2$ and $y = 3x - 5$. [2 marks]

4. Compare $y = 2x + 6$ and $2y = 4x + 12$. [2 marks]

5. Revenue is $9n$ and cost is $50 + 4n$ dollars. Find break-even. [2 marks]

6. Revenue is $12n$ and cost is $70 + 5n$. Find the smallest quantity giving at least 35 dollars profit. [3 marks]