Practice worksheet | Linear models and optimisation

Interpreting intersections and break-even points

Name: _____ Date: _____

6 questions | 12 marks

1. Find equal cost for $A = 40 + 2n$ and $B = 16 + 5n$. [2 marks]

2. For the same plans, which is cheaper at 12 uses? [2 marks]

3. A product sells for AUD 28 and costs AUD 210 fixed plus AUD 13 per unit. Find break-even. [2 marks]

4. Find profit on 20 products in Question 3. [2 marks]

5. Profit is $P = 12n - 95$. Find the smallest profitable whole-number attendance. [2 marks]

6. Why do $A = 30 + 4n$ and $B = 80 + 4n$ never have equal cost? [2 marks]