Inverse-proportion graphs and asymptotes

Name: _____ Date: _____

6 questions | 12 marks

1. y is inversely proportional to x, with y=6 at x=4. Find its rule. [2 marks]

2. For $y = -18/x$, find y at x=3 and x=-6. [2 marks]

3. Determine whether (2,12), (3,8), (6,4) fit one inverse-proportion rule. [2 marks]

4. For $y = 5/(x + 2) - 3$, state its vertical and horizontal asymptotes. [2 marks]

5. A rectangular garden has fixed area 48 m². Express width w in terms of length l, and find w when l=12 m. [2 marks]

6. Explain why $y = 12 - 2x$ is not inverse proportion, even while it is positive and decreasing. [2 marks]