Practice worksheet | Introduction to calculus

Stationary points

Name: _____ Date: _____

6 questions | 21 marks

1. Find and classify the stationary point of $f(x) = x^2 + 2x + 4$. [3 marks]

2. Classify the stationary point of $g(x) = -x^2 + 6x - 1$. [3 marks]

3. Describe the stationary point of $h(x) = x^3 + 2$. [3 marks]

4. Classify all stationary points of $p(x) = x^3 - 12x$. [4 marks]

5. Classify all stationary points of $q(x) = x^4 - 8x^2$. [5 marks]

6. Explain why $f(x) = x^4 + 1$ has a stationary minimum at 0. [3 marks]