Practice worksheet | Introduction to calculus

Tangent and normal lines

Name: _____ Date: _____

6 questions | 18 marks

1. Find the tangent to $y = x^2$ at $x = 1$. [3 marks]

2. Find the normal to $y = x^2$ at $x = 1$. [3 marks]

3. Find the tangent to $y = x^3$ at $x = 2$. [3 marks]

4. Find the normal to $y = 3x^2$ at $x = -1$. [3 marks]

5. Find tangent and normal to $y = x^2$ at the origin. [3 marks]

6. Can $(1, 4)$ be a point of tangency on $y = x^2 + 1$? Explain. [3 marks]