Practice worksheet | Introduction to calculus

Differentiating powers and polynomials

Name: _____ Date: _____

6 questions | 18 marks

1. Differentiate $3x^4 - 2x^2 + 5$. [3 marks]

2. Find d/dt of $6t^3 + t - 8$. [3 marks]

3. Differentiate $y = 9 - 4x$. [3 marks]

4. Differentiate $(x+2)(x-3)$. [3 marks]

5. Differentiate $f(x) = \frac{1}{2}x^4 - 3x^2 + 6x$. [3 marks]

6. A student differentiates $8x^3$ as $8x^2$. Correct and explain. [3 marks]