Practice worksheet | Differentiation and applications

Chain rule

Name: _____ Date: _____

6 questions | 14 marks

1. Differentiate $(4x+3)^6$. [2 marks]

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

3. Differentiate $\frac{1}{x^2+1}$. [2 marks]

4. Differentiate $x(x+1)^4$. [3 marks]

5. Find the gradient of $y=(5-x)^3$ at $x=2$. [2 marks]

6. Find the derivative of $y=\sqrt{2x-1}$ and state its domain. [3 marks]