**Differentiation of Algebraic Functions**

1. Find the 2nd derivative of $g(x)=\frac{x^{2}}{x^{2} + 1}$

2. Find $\frac{d^{3}}{dx^{3}}$ (7x3 – 8x2 + 2x)

**Use differentials to approximate the following:**

1. $∛127$

2. sin 31$°$