MATH-101
Quiz 3

Name:- ID:-

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1. Find equations of both lines through the point $(2,1)$ that are tangent to the curve $y = x^3 + 1$.

2. Suppose that $f(2) = -3, g(2) = 4, f'(2) = -2,$ and $g'(2) = 7.$ Find $\left.\frac{d}{dx}\left\{\frac{2g(x)}{1+f(x)}\right\}\right|_{x=2}$.

3. If $y = \dfrac{\ln x}{\sin(\pi x)e^{x}}$, then $\left.\dfrac{dy}{dx}\right|_{x=1/2} =$