Math 101-162-Quiz #3

Name: **ID**   **Serial:**

Q1: Find the slope of the tangent line to the curve $y = \sqrt[4]{2x^3} + e^2 x$ at $x = 2$

Q2: If $g(x) = \dfrac{x^2}{f(\sqrt{x})}$ and $f(2) = 1, f'(2) = -1,$ find $g'(4)$

Q3: Find the derivative of $y = \pi^x x^\pi$

Q4: Find $\lim\limits_{x \to \frac{\pi}{2}} \dfrac{\tan(\cos(x))}{\cos(x)}$