

Quiz 5

1. Find $f'(x)$ when $f(x) = \sqrt{x}(x^2 + \ln(3))$.
2. Find $g'(x)$ when $g(x) = \frac{\sin(x)}{x^2}$.
3. Find the tangent and normal line at $x = 0$ for the function $h(x) = e^x + x$.
4. Find $(fg)'(-\pi)$ when $f(x) = 2x^3$ and $g(x) = \tan(x)$.