

Q1. Find y' , if $y = 2^{\sin^2(x^3)}$



Q2. If $x^2 + x^2 y^2 + \tan^{-1}(y) = 1$, evaluate $\frac{dy}{dx}$ at $(-1, 0)$



Bonus: Evaluate $\lim_{x \rightarrow \pi/3} \frac{\sin 3x}{3x - \pi}$

