Name	ID	SEC 28	Sr

Q1) Find the equation of the tangent line to the curve $x^2 + xy + y^3 = 1$ at the point where $x = 1$.

Q2) Find the derivative of $y = x \sin^{-1} x + \sqrt{1 - x^2}$.

Q3) Find the derivative of $y = (\tan x)^{\frac{1}{x}} + \log_3(e^x - 1)$.

Q4) A particle moves with position function
$$s = f(t) = \frac{9t}{t^2 + 9t}, \qquad t \geq 0. \; t \text{ is measurd is seconds and } s \text{ in meters.}$$
Find the total distance travelld by the particle during the first 4 seconds.