Find dy/dx if $y = \ln\sqrt{x^3 + x^2 + 1}$	Use log differentiation to find dy/dx if $$y = \frac{\sqrt{x+1}(2-x)^3}{(x+5)^8}$$	$$\int \frac{x^3 - 3x^2 + 8}{x-2}\,dx$$
$$\int \frac{1-3y}{\sqrt{2y-3y^2}}\,dy$$	$$\int \frac{6x+1}{3x}\,dx$$	$$\int_1^{e^6} \frac{\sqrt{\ln x}}{x}\,dx$$
$$\int_0^1 \frac{1-\cos x}{x - \sin x}\,dx$$	$g(x) = \displaystyle\int_1^{\ln\sqrt{x}} (t^3 + 3)\,dt$. Find g'(x)	$$\int \frac{x+1}{x^2 + 2x + 1}\,dx$$
Solve the differential equation $$\frac{dy}{dx} = \frac{2x}{x^2 - 9} \quad (0, 4)$$	Find the equation of the tangent line at (e, 1) $$y^2 + \ln(xy) = 2$$	