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Question1: If $r = \sin(f(t))$, $f(0) = \frac{\pi}{3}$, and $f'(0) = 4$. Find the tangent equation to the curve of r when $t = 0$

Question2: If $2\sqrt{y} = x - y$, find y'' at the point (8,4)

Question3. Find the derivative of $y = \log_2 \left(\frac{x^2 e^2}{2\sqrt{x+1}} \right)$.