

10 A curve is such that $\frac{d^2y}{dx^2} = \frac{24}{x^3} - 4$. The curve has a stationary point at P where $x = 2$.

(i) State, with a reason, the nature of this stationary point. [1]

(ii) Find an expression for $\frac{dy}{dx}$. [4]

(iii) Given that the curve passes through the point $(1, 13)$, find the coordinates of the stationary point P . [4]