

- 7 A curve is such that $\frac{dy}{dx} = 5 - \frac{8}{x^2}$. The line $3y + x = 17$ is the normal to the curve at the point P on the curve. Given that the x -coordinate of P is positive, find
- (i) the coordinates of P , [4]
 - (ii) the equation of the curve. [4]