6 A curve is such that $\dfrac{\mathrm{d}y}{\mathrm{d}x} = 3x^{\frac{1}{2}} - 6$ and the point (9, 2) lies on the curve.

   (i) Find the equation of the curve. [4]

   (ii) Find the x-coordinate of the stationary point on the curve and determine the nature of the stationary point. [3]