

10 A curve has equation $y = 2x^2 - 8x\sqrt{x} + 8x + 1$ for $x \geq 0$

10 (a) Prove that the curve has a maximum point at $(1, 3)$

Fully justify your answer.

[9 marks]

10 (b) Find the coordinates of the other stationary point of the curve and state its nature.

[2 marks]