



5 The equation of a curve is such that  $\frac{dy}{dx} = 4x - 3\sqrt{x} + 1$ .

(a) Find the  $x$ -coordinate of the point on the curve at which the gradient is  $\frac{11}{2}$ . [3]

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(b) Given that the curve passes through the point (4, 11), find the equation of the curve. [4]

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