

- 7 (i) A straight line passes through the point $(2, 0)$ and has gradient m . Write down the equation of the line. [1]
- (ii) Find the two values of m for which the line is a tangent to the curve $y = x^2 - 4x + 5$. For each value of m , find the coordinates of the point where the line touches the curve. [6]
- (iii) Express $x^2 - 4x + 5$ in the form $(x + a)^2 + b$ and hence, or otherwise, write down the coordinates of the minimum point on the curve. [2]