1 (a) (i) Express $x^2 - 6x + 11$ in the form $(x-a)^2 + b$ where a and b are constants. [2]

(ii) Hence state the equation of the line of symmetry of the curve $y = x^2 - 6x + 11$. [1]

(b) (i) Find the discriminant of $px^2 + (2p-1)x + p$, where p is a constant. Give your answer in a simplified form in terms of p. [2]

(ii) Given that $px^2 + (2p-1)x + p = 0$ has equal roots, find the value of p. [2]