1. June/2023/Paper_9709/12/No.3

    (a) Express $4x^2 - 24x + p$ in the form $a(x + b)^2 + c$, where a and b are integers and c is to be given in terms of the constant p.   [2]

    (b) Hence or otherwise find the set of values of p for which the equation $4x^2 - 24x + p = 0$ has no real roots.   [1]

Solve the equation $8x^6 + 215x^3 - 27 = 0$. [3]