6 The polynomial p is given by $\mathrm{p}(x) = 36x^3 - 15x^2 - 2x + 1$.

(a) Show that $x = -0.25$ is a root of the equation $\mathrm{p}(x) = 0$. [1]

(b) Show that the equation $\mathrm{p}(x) = 0$ has a repeated root. [4]

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