1   **In this question you must show detailed reasoning.**

Solve the following equations.

(a) $\dfrac{x}{x+1} - \dfrac{x-1}{x+2} = 0$ [3]

(b) $\dfrac{8}{x^6} - \dfrac{7}{x^3} - 1 = 0$ [3]

(c) $3^{x^2-7} = \dfrac{1}{243}$ [2]