11 A curve has equation $y = \dfrac{\left(x^2 - 5\right)^{\frac{1}{3}}}{x + 1}$ for $x > -1$.

(a) Show that $\dfrac{\mathrm{d}y}{\mathrm{d}x} = \dfrac{Ax^2 + Bx + C}{3\left(x + 1\right)^2\left(x^2 - 5\right)^{\frac{2}{3}}}$ where A, B and C are integers. [6]

(b) Find the x-coordinate of the stationary point on the curve. [2]

(c) Explain how you could determine the nature of this stationary point. [2]
[You are not required to find the nature of this stationary point.]

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