10 A curve has equation $y = \dfrac{\left(2x^2+10\right)^{\frac{3}{2}}}{x-1}$ for $x > 1$.

(a) Show that $\dfrac{\mathrm{d}y}{\mathrm{d}x}$ can be written in the form $\dfrac{\left(2x^2+10\right)^{\frac{1}{2}}}{\left(x-1\right)^2}(Ax^2+Bx+C)$, where A, B and C are integers. [5]

(b) Show that, for $x > 1$, the curve has exactly one stationary point. Find the value of x at this stationary point. [4]

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