

2. A curve has parametric equations

$$x = 6t + 1 \quad y = 5 - \frac{4}{3t} \quad t \neq 0$$

Show that the Cartesian equation of the curve can be expressed in the form

$$y = \frac{ax + b}{x - 1} \quad x \neq k$$

where a , b and k are constants to be found.

(3)