7 A curve has equation $5x^2y + 4e^{2y} - 7x + 10 = 0$.

(a) Find an expression in terms of x and y for $\frac{dy}{dx}$ and hence find the gradient of the curve at the point for which $y = 0$. [6]

(b) Show that there is no point on the curve at which the tangent is parallel to the y-axis. [2]

Additional page

If you use the following page to complete the answer to any question, the question number must be clearly shown.