



The diagram shows part of the curve $y = \frac{2}{(3-2x)^2} - x$ and its minimum point M , which lies on the x -axis.

- (a) Find expressions for $\frac{dy}{dx}$, $\frac{d^2y}{dx^2}$ and $\int y dx$. [6]

[illegible]

- (b) Find, by calculation, the x -coordinate of M . [2]

[illegible]

- (c) Find the area of the shaded region bounded by the curve and the coordinate axes. [2]

[illegible]