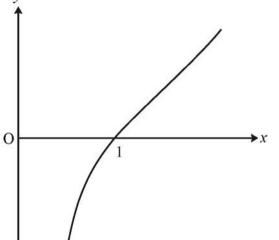
The diagram shows part of a curve which passes through the point (1, 0).



The gradient of the curve is given by 
$$\frac{dy}{dx} = 6x + \frac{8}{x^3}$$
.

Determine whether the curve passes through the point (2, 12). [6]