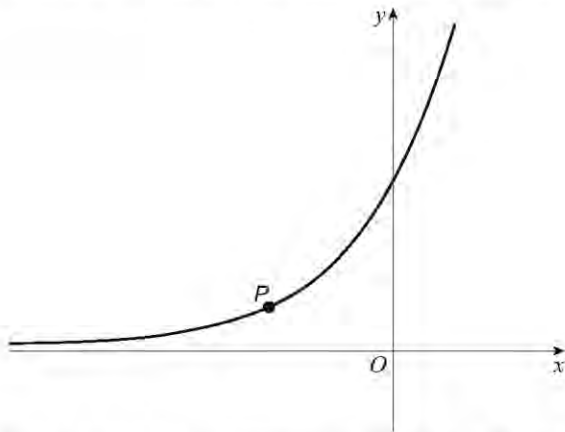


10

A curve has the equation

$$y = e^{3x}$$

and the point P lies on the curve, as shown in the diagram.



The tangent to the curve at P is parallel to the line with equation $x - 9y = 23$

Find the x -coordinate of P

[5 marks]