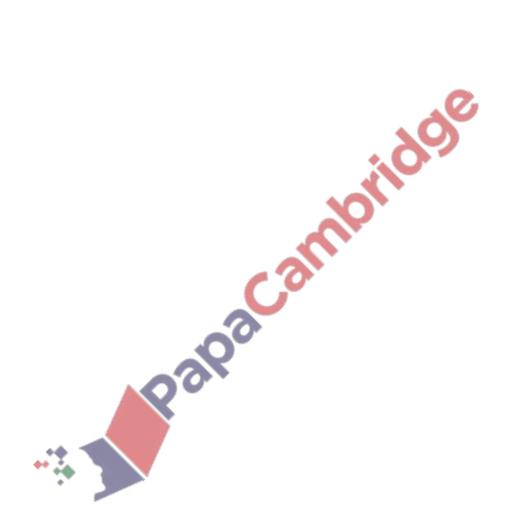
## <u>Logarithmic and exponential functions – 2022 Nov IGCSE 0606 Additional Math</u>

1. Nov/2022/Paper\_0606\_11/No.3

When  $y^3$  is plotted against  $\ln x$ , a straight line graph is obtained, passing through the points (1, 5) and (6, 15). Find y in terms of x.



## **2.** Nov/2022/Paper\_0606\_11/No.9

Solve the equation  $2\log_p y + 10\log_y p - 9 = 0$ , where p is a positive constant, giving y in terms of p. [5]



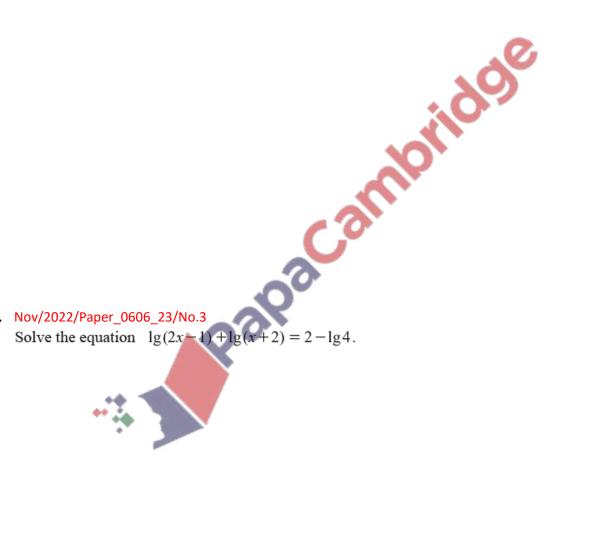
## 3. Nov/2022/Paper\_0606\_22/No.2

## DO NOT USE A CALCULATOR IN THIS QUESTION.

Find the x-coordinates of the points where the line y = 3x - 8 cuts the curve  $y = 2x^3 + 3x^2 - 26x + 22$ .

- 4. Nov/2022/Paper\_0606\_22/No.4
  - Solve the equation  $\log_3(11x-8) = 1 + \frac{2}{\log_x 3}$  given that x > 1.

[5]



**5.** Nov/2022/Paper\_0606\_23/No.3

[5]