

8 Given that n satisfies the equation

$$\log_a n = \log_a 3 + \log_a (2n - 1)$$

(a) find the value of n .

(3)

Given that $\log_p x = 3$ and $\log_p y - 3 \log_p 2 = 4$

(b) (i) express x in terms of p ,

(1)

(ii) express xy in terms of p .

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Question 8 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



P 6 6 0 2 4 A 0 2 3 3 6

Question 8 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Question 8 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 8 is 8 marks)

P 6 6 0 2 4 A 0 2 5 3 6