Question 10

BOARD OF STUDIES
NEW SOUTH WALES

a) i)

ii)

iii)

BOARD OF STUDIES
NEW SOUTH WALES

(b)

$$\frac{dl}{dx} = \left(b^2 + (x+8)^2\right) + \left(b^2 + (x-8)^2\right)$$

$$= \left[b^2 + (x+8)^2\left(2b + 2(x-8)\right)\right] + \left[b^2 + (x-8)^2 \times 2b + 2(x-8)\right]$$

$$=$$