

(17) Solve the following quadratic equations by completing the square

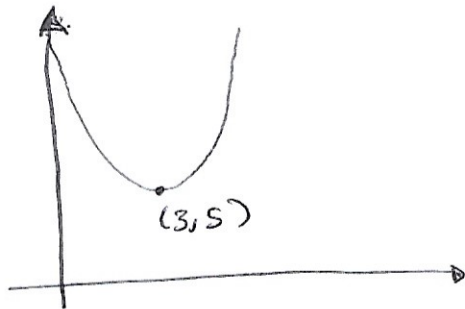
(i) $x^2 + 4x \pm 4$ [2]

(ii) $x^2 + 6x = 1$ [2]

(iii) $\frac{(x^2 + 2x)}{2} = 1$ [3]

(iv) $2x^2 + 20x + 9 = 0$ [3]

(18)



The graph shows the function

$$f(x) = x^2 + ax + b.$$

what are the values of a and b ? [3]