11 Solve the simultaneous equations

$$x - y = 5$$
$$2x^2 + y^2 + 2xy = 85$$

Show clear algebraic working.

(6)

$$\left[\text{The solutions of } ax^2 + bx + c = 0 \text{ where } a \neq 0 \text{ are given by } x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \right]$$

Question 11 continued

(Total for Question 11 is 6 marks)

Turn over for Question 12