

### 5.5 Homework

Use the method of substitution to obtain a quadratic equation in only one variable. Solve your equation, and find the possible pairs of values for  $x$  and  $y$ .

(i)  $y = x^2$   
 $y = 10 - 3x$

(ii)  $y = x^2$   
 $y = 8 - 7x$

(iii)  $y = x^2$   
 $y = 5x + 36$

(iv)  $y = x^2 + 20$   
 $y = 17x - 50$

$$\begin{aligned} \text{(v)} \quad y &= x^2 - 2x + 1 \\ y &= 10x - 31 \end{aligned}$$

$$\begin{aligned} \text{(vi)} \quad y &= x^2 + 4x \\ y &= 6x + 48 \end{aligned}$$

$$\begin{aligned} \text{(vii)} \quad y &= x^2 - 4x + 5 \\ y &= 3 - x \end{aligned}$$

$$\begin{aligned} \text{(viii)} \quad y &= x^2 + 5x + 17 \\ y &= 2 - 3x \end{aligned}$$