

5.5 Homework

GCSE Mathematics Simultaneous Equations III

Question 1

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

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

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

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

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

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Teachers may obtain detailed worked solutions to the exercises by email from MHHShrewsbury@Gmail.com