



Additional Math with Ali Hashir
Simultaneous Equations
 Answers

CIE O Level Additional Mathematics 4037 • Total: 58 marks

Easy (Q1–Q2)

Q1. $(3, 2)$ and $(-2, -3)$

Q2. $(0, -6)$ and $(3, 0)$

Medium (Q3–Q7)

Q3. Shorter sides are 8 cm and 15 cm

Q4. Length = 8 cm, width = 6 cm

Q5. $(-3, -2)$ and $(2, 3)$

Q6. $x = 4$, $y = 2$ (repeated root $\Rightarrow$ only one solution)

Q7. $x = 6$, $y = 4$ or $x = 1$, $y = -1$

Hard (Q8–Q10)

Q8. The numbers are 2 and 7

Q9. Original length = 10 cm, original width = 6 cm

Q10. $(-4, -3)$ and $(3, 4)$; distance = $7\sqrt{2}$

Extra Challenge

(i). $vt = 120$ and $v + 10t = 70$

(ii). Eliminating v gives $t^2 - 7t + 12 = 0$

(iii). $v = 40$, $t = 3$ or $v = 30$, $t = 4$

Full worked solutions available at the website.

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