

1.6 Answers

GCSE Mathematics Simultaneous Equations III

1.6.1 Solutions (1.2 FOIL)

(i) $x^2 + 11x + 30$

(ii) $4x^2 + 11x + 7$

(iii) $6x^2 + 23x + 20$

(iv) $88x^2 + 127x + 45$

(v) $x^2 + 5x - 24$

(vi) $3x^2 - 11x - 20$

(vii) $5x^2 - 37x + 14$

(viii) $x^2 + 10x + 25$

(ix) $4x^2 + 28x + 49$

(x) $25x^2 - 30x + 9$

1.6.2 Solutions (1.3 Gathering together like terms)

(i) $x^2 + 12x + 11$

(ii) $2x^2 + 5x + 3$

(iii) $5x^2 + 9x + 1$

(iv) $x^2 - 5x - 4$

(v) $3x^2 + 12x + 3$

(vi) $2x^2 + 19x - 3$

(vii) $5x^2 - 11x - 3$

(viii) $x^2 + 2x + 4$

(ix) $3x^2 + 17x$

(x) $12x^2 + 13x - 8$

1.6.3 Solutions (1.4 Rearranging equations into the form $f(x) = 0$)

(i) $8x^2 + 5x + 3 = 0$

(ii) $2x^2 - 4x + 8 = 0$

(iii) $7x^2 - 8x + 8 = 0$

(iv) $9x^2 + 10x - 13 = 0$

(v) $6x^2 + 17x - 10 = 0$

(vi) $12x - 32 = 0$

(vii) $4x^2 + 8x - 14$

(viii) $6x^2 - 4x + 12 = 0$

(ix) $8x^2 - 4x + 1 = 0$

(x) $5x^2 - x - 4 = 0$

1.6.4 Solutions (1.5 Mixture)

(i) $x^2 + 5x + 21 = 0$

(ii) $6x^2 + 19x + 40 = 0$

(iii) $x^2 - 7x - 38 = 0$

(iv) $x^2 + 7x - 15 = 0$

(v) $x^2 + 10x + 42$

(vi) $3x^2 - 16x + 5 = 0$

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