

Lesson 5

GCSE Mathematics Simultaneous Equations I

5.1 Consolidation Mixed Problems

Solve these pairs of simultaneous equations;

- Subtract the equations when the identical terms have the same sign.
- Add the equations when the identical terms have opposite signs.

5.2 Exercise

Marks Available : 24

Question 1

$$\left. \begin{array}{l} 3x + 2y = 19 \\ 2x - 2y = 6 \end{array} \right\}$$

[3 marks]

Question 2

$$\left. \begin{array}{l} 5x + 2y = 13 \\ x + 2y = 9 \end{array} \right\}$$

[3 marks]

Question 3

$$\left. \begin{array}{l} 3x - 4y = 17 \\ x - 4y = 3 \end{array} \right\}$$

[3 marks]

Question 4

$$\left. \begin{array}{l} x + 3y = 10 \\ x + y = 6 \end{array} \right\}$$

[3 marks]

Question 5

$$\left. \begin{array}{l} 3x - y = 4 \\ 2x + y = 11 \end{array} \right\}$$

[3 marks]

Question 6

$$\left. \begin{array}{l} 4y + 7x = 37 \\ 4y + 2x = 2 \end{array} \right\}$$

[3 marks]

Question 7

$$\left. \begin{array}{l} 5y + 3x = 18 \\ 2y + 3x = 0 \end{array} \right\}$$

[3 marks]

Question 8

$$\left. \begin{array}{l} 8y + 5x = 1 \\ 8y + 3x = 7 \end{array} \right\}$$

[3 marks]

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Teachers may obtain detailed worked solutions to the exercises by email from mhh@shrewsbury.org.uk