

Lesson 6

GCSE Mathematics Simultaneous Equations I

6.1 Awkward Subtraction Problems

Solve these **TRICKY** pairs of simultaneous equations by **SUBTRACTION**;

6.2 Exercise

Marks Available : 24

Question 1

$$\left. \begin{array}{l} 6y + 5x = -2 \\ 2y + 5x = -14 \end{array} \right\}$$

Careful !!

$$(-2) - (-14) = 12$$

[3 marks]

Question 2

$$\left. \begin{array}{l} 5y + 5x = -5 \\ 2y + 5x = -17 \end{array} \right\}$$

[3 marks]

Question 3

$$\left. \begin{array}{l} 7y + 4x = 2 \\ 5y + 4x = -2 \end{array} \right\}$$

[3 marks]

Question 4

$$\left. \begin{array}{l} 8y + 3x = -9 \\ 4y + 3x = 3 \end{array} \right\}$$

[3 marks]

Question 5

$$\left. \begin{array}{l} 6y + 2x = -28 \\ 2y + 2x = -12 \end{array} \right\}$$

[3 marks]

Question 6

$$\left. \begin{array}{l} 2y + 9x = 19 \\ 2y + 2x = -2 \end{array} \right\}$$

[3 marks]

Question 7

$$\left. \begin{array}{l} 8y + 5x = -14 \\ 8y + 2x = 4 \end{array} \right\}$$

[3 marks]

Question 8

$$\left. \begin{array}{l} 3y + 7x = -28 \\ 3y + x = -22 \end{array} \right\}$$

[3 marks]

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