

Lesson 11

GCSE Mathematics Simultaneous Equations I

11.1 Introducing Fraction Answers

Solve these pairs of simultaneous equations;

This is a 'random' collection of problems.

Some answers are negative, and some are decimal fractions.

11.2 Exercise

Marks Available : 60

Question 1

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

[5 marks]

Question 2

$$\left. \begin{array}{l} 5x + 2y = 11 \\ 3x + 4y = 8 \end{array} \right\}$$

[5 marks]

Question 3

$$\left. \begin{array}{l} 4x + 2y = 14 \\ 2x + 3y = 15 \end{array} \right\}$$

[5 marks]

Question 4

$$\left. \begin{array}{l} 3x - 4y = 4.5 \\ 2x + 2y = 10 \end{array} \right\}$$

[5 marks]

Question 5

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

[5 marks]

Question 6

$$\left. \begin{array}{l} 3x + 2y = 2 \\ 2x + 6y = 13 \end{array} \right\}$$

[5 marks]

Question 7

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

[5 marks]

Question 8

$$\left. \begin{array}{l} 6x + 2y = 14 \\ 3x - 5y = 10 \end{array} \right\}$$

[5 marks]

Question 9

$$\left. \begin{array}{l} 2x + 4y = 15 \\ x + 5y = 21 \end{array} \right\}$$

[5 marks]

Question 10

$$\left. \begin{array}{l} x - 5y = 15 \\ 3x - 7y = 17 \end{array} \right\}$$

[5 marks]

Question 11

$$\left. \begin{array}{l} 3x - y = 5 \\ x + 3y = -20 \end{array} \right\}$$

[5 marks]

Question 12

$$\left. \begin{array}{l} 5x + 4y = 11 \\ 2x + 3y = 9 \end{array} \right\}$$

[5 marks]

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