

## Lesson 2

### GCSE Mathematics Simultaneous Equations I

#### 2.1 Combination By Subtraction

Solve these pairs of simultaneous equations.

**NOTICE :** You'll combine the equations by SUBTRACTION, not addition.

#### 2.2 Exercise

Marks Available : 24

##### Question 1

$$\left. \begin{array}{l} 4y + 3x = 17 \\ 2y + 3x = 13 \end{array} \right\}$$

[ 3 marks ]

##### Question 2

$$\left. \begin{array}{l} 4y + 3x = 15 \\ 2y + 3x = 9 \end{array} \right\}$$

[ 3 marks ]

##### Question 3

$$\left. \begin{array}{l} 5y + 2x = 25 \\ 2y + 2x = 16 \end{array} \right\}$$

[ 3 marks ]

##### Question 4

$$\left. \begin{array}{l} 6y + 5x = 44 \\ 2y + 5x = 28 \end{array} \right\}$$

[ 3 marks ]

**Question 5**

$$\left. \begin{array}{l} 9y + 4x = 55 \\ 5y + 4x = 43 \end{array} \right\}$$

[ 3 marks ]

**Question 6**

$$\left. \begin{array}{l} 7y + 4x = 23 \\ 2y + 4x = 8 \end{array} \right\}$$

[ 3 marks ]

**Question 7**

$$\left. \begin{array}{l} 16y + 3x = 16 \\ 12y + 3x = 15 \end{array} \right\}$$

[ 3 marks ]

**Question 8**

$$\left. \begin{array}{l} 12y + 12x = 10 \\ 2y + 12x = 5 \end{array} \right\}$$

[ 3 marks ]

This document is a part of a **Mathematics Community Outreach Project** initiated by Shrewsbury School

It may be freely duplicated and distributed, unaltered, for non-profit educational use

In October 2020, Shrewsbury School was voted “**Independent School of the Year 2020**”

© 2025 Number Wonder

Teachers may obtain detailed worked solutions to the exercises by email from [MHHShrewsbury@Gmail.com](mailto:MHHShrewsbury@Gmail.com)