# 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 <u>SUBTRACTION</u>, not addition.

#### 2.2 Exercise

Marks Available : 24

# **Question 1**

 $\begin{array}{rcl}
4y + 3x &= & 17 \\
2y + 3x &= & 13
\end{array}$ 

[ 3 marks ]

# **Question 2**

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

[3 marks]

### **Question 3**

 $5y + 2x = 25 \\ 2y + 2x = 16$ 

[ 3 marks ]

#### **Question 4**

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

[ 3 marks ]

### **Question 5**

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

[3 marks]

### **Question 6**

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

[3 marks]

### **Question 7**

**Question 8** 

 $\begin{array}{rcl}
12y + 12x &= & 10 \\
2y + & 12x &= & 5
\end{array}$ 

 $\begin{array}{cccc}
16y + 3x &= 16 \\
12y + 3x &= 15
\end{array}$ 

[3 marks]

[ 3 marks ]

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