**Simultaneous Equations GREEN**

1. Solve x + 8y = 26

 x + y = 5

 x = ……………

 y = ……………

 **(4 marks)**

2. Solve 2x + 3y = 16

 4x – 3y = -4

 x = ……………

 y = ……………

 **(4 marks)**

3. Solve 2x – 3y = 11

 5x + 2y = 18

 x = ……………

 y = ……………

 **(4 marks)**

4. Solve 2x + 3y = -3

 3x – 2y = 28

 x = ……………

 y = ……………

 **(4 marks)**

5. Solve 6x – 2y = 33

 4x + 3y = 9

 x = ……………

 y = ……………

 **(4 marks)**

6. Solve 3x + 7y = 26

 4x + 5y = 13

 x = ……………

 y = ……………

 **(4 marks)**

7. Solve 3x – 4y = 11

 5x + 6y = 12

 x = ……………

 y = ……………

 **(4 marks)**

8. Solve 6x – 4y = 8

 5x + 3y = -25

 x = ……………

 y = ……………

 **(4 marks)**

**Simultaneous Equations AMBER**

1) Scale up (if necessary)

2) Add or subtract (to eliminate)

3) Solve (to find x)

4) Substitute (to find y)

1. Solve x + 8y = 26

 x + y = 5

No need to scale up this one!

 x = ……………

 y = ……………

 **(4 marks)**

2. Solve 2x + 3y = 16

 4x – 3y = -4

No need to scale up this one!

 x = ……………

 y = ……………

 **(4 marks)**

3. Solve 2x – 3y = 11

 5x + 2y = 18

From here onwards they need scaling up!

 x = ……………

 y = ……………

 **(4 marks)**

4. Solve 2x + 3y = -3

 3x – 2y = 28

 x = ……………

 y = ……………

 **(4 marks)**

5. Solve 6x – 2y = 33

1) Scale up (if necessary)

2) Add or subtract (to eliminate)

3) Solve (to find x)

4) Substitute (to find y)

 4x + 3y = 9

 x = ……………

 y = ……………

 **(4 marks)**

6. Solve 3x + 7y = 26

 4x + 5y = 13

 x = ……………

 y = ……………

 **(4 marks)**

7. Solve 3x – 4y = 11

 5x + 6y = 12

 x = ……………

 y = ……………

 **(4 marks)**

8. Solve 6x – 4y = 8

 5x + 3y = -25

 x = ……………

 y = ……………

 **(4 marks)**

**Simultaneous Equations RED**

1) Scale up (if necessary)

2) Add or subtract (to eliminate)

3) Solve (to find x)

4) Substitute (to find y)

1. Solve x + 8y = 26

 x + y = 5

No need to scale up this one!

The x values have the same coefficient and the same sign so SUBTRACT

 x = ……………

 y = ……………

 **(4 marks)**

2. Solve 2x + 3y = 16

 4x – 3y = -4

No need to scale up this one!

The y values have the same coefficient and the same sign so ADD

 x = ……………

 y = ……………

 **(4 marks)**

3. Solve 2x – 3y = 11 (x5)

 5x + 2y = 18 (x2)

From here onwards they need scaling up!

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 10x – 15y = 55

The x values have the same coefficient and the same sign so SUBTRACT

 10x + 4y = 36

 x = ……………

 y = ……………

 **(4 marks)**

4. Solve 2x + 3y = -3 (x3)

 3x – 2y = 28 (x2)

 x = ……………

 y = ……………

 **(4 marks)**

5. Solve 6x – 2y = 33

1) Scale up (if necessary)

2) Add or subtract (to eliminate)

3) Solve (to find x)

4) Substitute (to find y)

 4x + 3y = 9

 x = ……………

 y = ……………

 **(4 marks)**

6. Solve 3x + 7y = 26

 4x + 5y = 13

 x = ……………

 y = ……………

 **(4 marks)**

7. Solve 3x – 4y = 11

 5x + 6y = 12

 x = ……………

 y = ……………

 **(4 marks)**

8. Solve 6x – 4y = 8

 5x + 3y = -25

 x = ……………

 y = ……………

 **(4 marks)**