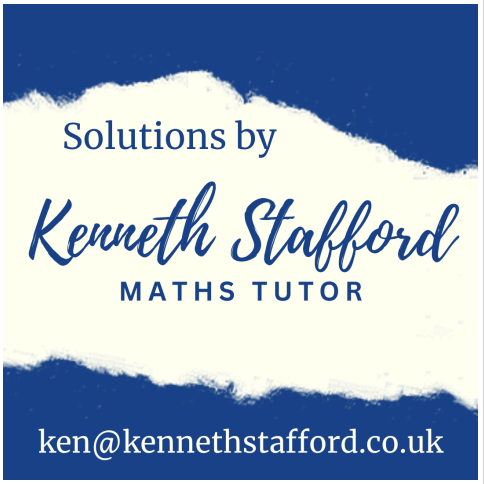
Name: SOLUTIONS

GCSE (1 - 9)

Simultaneous Equations





These questions are compiled from *released* Pearson Edexcel GCSE maths exam papers
They contain exam questions from up until the ***Summer 2023*** exam series
More recent exam papers do exist but are withheld for mock exams
As new exam papers are released these worksheets will gradually be updated
The ***most current*** version of these worksheets will always be available at: kennethstafford.co.uk

Question	Where the question appeared
1	Edexcel, GCSE, Autumn 2017, Paper 3F, Q27
2	Edexcel, GCSE, Autumn 2018, Paper 1F, Q25
3	Edexcel, GCSE, Summer 2017, Paper 3F, Q16
4	Edexcel, GCSE, Summer 2019, Paper 3F, Q30
5	Edexcel, GCSE, Summer 2022, Paper 2F, Q28

1

Solve the simultaneous equations

$x + 3y = 12$

$5x - y = 4$

$3 \times$

$x + 3y = 12$

$15x - 3y = 12$

$16x = 24$

$x = \frac{24}{16}$

$x = 1.5$

$(1.5) + 3y = 12$

$3y = 10.5$

$y = \frac{10.5}{3}$

$y = 3.5$

$x =$ 1.5

$y =$ 3.5

(Total for Question 27 is 3 marks)

[Edexcel, GCSE, Autumn 2017, Paper 3F, Q27]

2

Solve the simultaneous equations

$5x + y = 21$

$x - 3y = 9$

$3 \times$

$15x + 3y = 63$

$x - 3y = 9$

$+$

$16x = 72$

$x = \frac{72}{16}$

$x = 4.5$

$5(4.5) + y = 21$

$22.5 + y = 21$

$y = -1.5$

$x =$ 4.5

$y =$ -1.5

(Total for Question 25 is 3 marks)

[Edexcel, GCSE, Autumn 2018, Paper 1F, Q25]

3

Solve the simultaneous equations

$$3x + y = -4$$
$$3x - 4y = 6$$

$\ominus$

$5y = -10$

$y = \frac{-10}{5}$

$y = -2$

$3x + (-2) = -4$

$3x = -2$

$x = \frac{-2}{3}$

$x =$ $-2/3$

$y =$ -2

(Total for Question 16 is 3 marks)

[Edexcel, GCSE, Summer 2017, Paper 3F, Q16]

4

Solve the simultaneous equations

$3x - 4y = 11$

$2x \quad 9x + 2y = 5$

$3x - 4y = 11$

$+ \quad 18x + 4y = 10$

$21x \quad = 21$

$x = \frac{21}{21}$

$x = 1$

$9(1) + 2y = 5$

$2y = -4$

$y = -\frac{4}{2}$

$y = -2$

$x =$ 1

$y =$ -2

(Total for Question 30 is 3 marks)

[Edexcel, GCSE, Summer 2019, Paper 3F, Q30]

5

Solve the simultaneous equations

$5x + 2y = 27$

$6x + 4y = 28$

$10x + 4y = 54$

$6x + 4y = 28$

$4x = 26$

$x = \frac{26}{4}$

$x = 6.5$

$6(6.5) + 4y = 28$

$39 + 4y = 28$

$4y = -11$

$y = \frac{-11}{4}$

$y = -2.75$

$x =$ 6.5

$y =$ -2.75

(Total for Question 28 is 3 marks)

[Edexcel, GCSE, Summer 2022, Paper 2F, Q28]