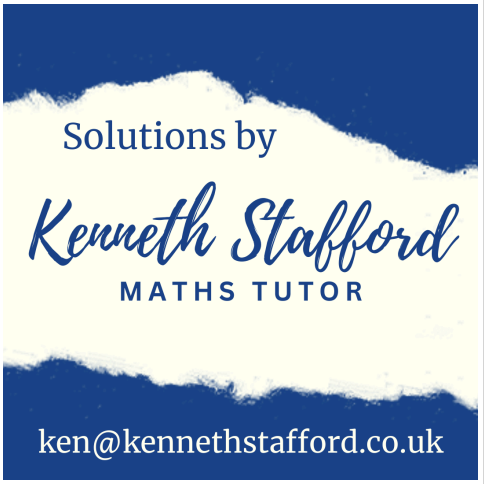
Name: SOLUTIONS

GCSE (1 - 9)

Stem and Leaf Diagrams





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 1F, Q10
2	Edexcel, GCSE, Summer 2018, Paper 3F, Q14
3	Edexcel, GCSE, Autumn 2019, Paper 3F, Q13
4	Edexcel, GCSE, Autumn 2020, Paper 1F, Q26
5	Edexcel, GCSE, Autumn 2021, Paper 3F, Q20
6	Edexcel, GCSE, Summer 2022, Paper 1F, Q21
7	Edexcel, GCSE, November 2022, Paper 2F, Q15

1

Jake and Sarah each played a computer game six times.

Their scores for each game are shown below.

Jake	10	9	8	11	12	8
Sarah	2	10	7	14	4	10

Range = 12 − 8 = 4

Range = 14 − 2 = 12

(a) Who had the most consistent scores, Jake or Sarah?
You must give a reason for your answer.

Jake. His range was 4. Sarah's range was 12.

(1)

Jake played a different game 20 times.

The stem and leaf diagram shows information about his scores.

0	9
1	2 3 3 4 5
2	5 6 6 6 6 7
3	1 3 4 6 8
4	0 2 9

Key
1 | 2 represents 12 points

Jake said his modal score was 6 points because 6 occurs most often in the diagram.

(b) Is Jake correct?
You must explain your answer.

No. His mode was 26.

(1)

(Total for Question 10 is 2 marks)

[Edexcel, GCSE, Autumn 2017, Paper 1F, Q10]

2

Here are the marks 20 students got in a French test.

76	82	84	69	80	64	70	81	75	91
87	67	80	70	94	76	81	69	71	77

(a) Show this information in a stem and leaf diagram.

6	4 7 9 9
7	0 0 1 5 6 6 7
8	0 0 1 1 2 4 7
9	1 4

Key

614 = 64

(3)

One of these students is going to be chosen at random.

The pass mark in the French test is 71

Omar writes,

The probability that this student failed the French test is $\frac{1}{4}$

Omar is wrong.

(b) Explain why.

6 students out of the 20 failed

$\frac{6}{20} \neq \frac{1}{4}$

(2)

(Total for Question 14 is 5 marks)

[Edexcel, GCSE, Summer 2018, Paper 3F, Q14]

3

The stem and leaf diagram below gives information about the ages of people in a social club.

3	1	4	5			
4	0	2	2	5	6	
5	0	1	7	7	8	9
6	3	4	5	9		
7	0	4				

Key: 4|2 represents 42 years

Find the range of these ages.

74 - 31 = 43

43 years

(Total for Question 13 is 2 marks)

[Edexcel, GCSE, Autumn 2019, Paper 3F, Q13]

5

Here are the heights, in centimetres, of 15 plants.

15 20 25 33 17 22 25 18
22 19 32 35 24 28 19

Draw a stem and leaf diagram for these heights.

1	5 7 8 9 9
2	0 2 2 4 5 5 8
3	2 3 5

Key: 1|5 = 15cm

(Total for Question 20 is 3 marks)

[Edexcel, GCSE, Autumn 2021, Paper 3F, Q20]

7

Hetvi asked her friends how many stickers they each have in their collection.
Here are her results.

77	86	94	87	71	98
74	103	71	85	82	84
97	91	88	89	75	

(a) Show this information in a stem and leaf diagram.

7	1 1 4 5 7
8	2 4 5 6 7 8 9
9	1 4 7 8
10	3

Key: 7|1 = 71

(3)

(b) Find the median number of stickers.

86

(2)

(Total for Question 15 is 5 marks)

[Edexcel, GCSE, November 2022, Paper 2F, Q15]