

GCSE Mathematics

F

Stem and Leaf Diagrams

Foundation Tier | Grades 3-4

Total Marks	Time	Questions
40	40 min	20

Instructions:

- Do not use a calculator when you see: 
- Answer all questions in the spaces provided.
- Show all your working - marks are awarded for method as well as final answers.
- Cross through any work you do not want to be marked.
- Check your answers if you have time at the end.

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Edexcel-style questions**Q1** 

Grade 3

Edexcel style

The stem-and-leaf diagram shows the ages of 12 people at a club. How many people are in their twenties (20-29)?

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

2 | 3 means 23

Answer _____

teachably

[1 mark]**Q2** 

Grade 3

Edexcel style

The stem-and-leaf diagram shows the ages of 14 people at a club. Find the mode.

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

2 | 3 means 23

Answer _____

teachably

[1 mark]

Q3

Grade 3

Edexcel style

The stem-and-leaf diagram shows the ages of 9 people at a club. Find the median age.

Stem	Leaves
1	2 5 9
2	1 3 4 6 8
3	0

$2 \mid 3$ means 23

Answer _____

teachably

[2 marks]**Q4**

Grade 4

Edexcel style

The stem-and-leaf diagram shows the ages of 11 people at a club. Find the range of ages.

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

$2 \mid 3$ means 23

Answer _____

teachably

[2 marks]

Q5

Grade 4Edexcel style

The back-to-back stem-and-leaf diagram shows the test scores of Class A and Class B (9 students each). Compare the median scores of the two classes.

Class A	Stem	Class B
8 4	5	1
9 5 2	6	0 4 8
6 3 1	7	2 5 7
0	8	3 6

6 | 3 means 63

Answer

AQA-style questions**Q6** 

Grade 3

AQA style

The stem-and-leaf diagram shows the test scores of 12 students. How many students scored in the 70s?

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

6 | 3 means 63

Answer _____

teachably

[1 mark]**Q7** 

Grade 3

AQA style

The stem-and-leaf diagram shows the test scores of 14 students. Find the mode.

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

6 | 3 means 63

Answer _____

teachably

[1 mark]

Q8

Grade 3

AQA style

The stem-and-leaf diagram shows the test scores of 9 students. Find the median score.

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

$6 \mid 3$ means 63

Answer _____

teachably

[2 marks]

Q9

Grade 4

AQA style

The stem-and-leaf diagram shows the test scores of 10 students. Find the range of scores.

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

$6 \mid 2$ means 62

Answer _____

teachably

[2 marks]

Q10

Grade 4

AQA style

The back-to-back stem-and-leaf diagram shows the running times (minutes) of Team A and Team B (7 runners each). Compare the median times of the two teams.

Team A	Stem	Team B
8 5	3	2
6 4 1	4	0 3 7
2 0	5	1 4 8

4 | 1 means 41

Answer _____

OCR-style questions

Q11 

Grade 3

OCR style

The stem-and-leaf diagram shows the waiting times (minutes) of 10 people. How many people waited less than 10 minutes?

Stem	Leaves
0	5 8 9
1	0 2 2 5 7
2	1 3

1 | 2 means 12

Answer _____

teachably

[1 mark]

Q12 

Grade 3

OCR style

The stem-and-leaf diagram shows the waiting times (minutes) of 12 people. Find the mode.

Stem	Leaves
0	5 8 9
1	0 2 2 2 5 7
2	1 3

1 | 2 means 12

Answer _____

teachably

[1 mark]

Q13

Grade 3

OCR style

The stem-and-leaf diagram shows the waiting times (minutes) of 9 people. Find the median waiting time.

Stem	Leaves
0	3 5 8 9
1	0 2 5 7
2	1

1 | 2 means 12

Answer _____

teachably

[2 marks]**Q14**

Grade 4

OCR style

The stem-and-leaf diagram shows the waiting times (minutes) of 8 people. Find the range of waiting times.

Stem	Leaves
0	2 6
1	1 5 8
2	0 3
3	1

1 | 5 means 15

Answer _____

teachably

[2 marks]

Q15

Grade 4

OCR style

The back-to-back stem-and-leaf diagram shows the daily sales (number of items) of Shop A and Shop B (9 days each). Compare the median sales of the two shops.

Shop A	Stem	Shop B
7 3	2	5
8 5 1	3	0 4 9
9 6 2	4	1 5 8
0	5	2 6

3 | 1 means 31

Answer _____

Teachably-style questions

Q16

Grade 3

Teachably style

The stem-and-leaf diagram shows the distances (km) run by 10 runners in a month. How many runners ran between 40 and 49 km?

Stem	Leaves
3	2 5 8
4	0 1 4 6 9
5	2 3

4 | 1 means 41

Answer _____

teachably

[1 mark]

Q17

Grade 3

Teachably style

The stem-and-leaf diagram shows the distances (km) run by 12 runners in a month. Find the mode.

Stem	Leaves
3	2 5 8
4	0 1 4 4 4 9
5	2 3

4 | 1 means 41

Answer _____

teachably

[1 mark]

Q18

Grade 3

Teachably style

The stem-and-leaf diagram shows the distances (km) run by 9 runners in a month. Find the median distance.

Stem	Leaves
3	2 5 8
4	0 1 4 6 9
5	2

4 | 1 means 41

Answer _____

teachably

[2 marks]

Q19

Grade 4

Teachably style

The stem-and-leaf diagram shows the distances (km) run by 8 runners in a month. Find the range of distances.

Stem	Leaves
2	4 8
3	1 5 7
4	2 6
5	0 3

3 | 1 means 31

Answer _____

teachably

[2 marks]

Q20

Grade 4

Teachably style

The back-to-back stem-and-leaf diagram shows the temperatures ($^{\circ}\text{C}$) recorded in Region A and Region B (9 days each). Compare the median temperatures of the two regions.

Region A	Stem	Region B
9 8 6	1	5 7
8 6 4 1	2	0 3 7 9
2 0	3	1 4 6

2 | 1 means 21

Answer _____

teachably

[4 marks]

END OF PAPER

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