

Foundation GCSE: Using Lists and Tables

Name: _____

Class: _____

Instructions: Answer all questions. Questions are ordered from easiest (1) to hardest (10). Working out should be shown where appropriate.

1. Find the median of the following list of eleven numbers:

14, 7, 22, 3, 19, 8, 25, 11, 6, 31, 15

2. Calculate the exact mean of the following set of eight numbers:

12, 17, 9, 24, 15, 8, 21, 10

3. The table below shows the number of goals scored by a football club over ten competitive matches. Find the total number of goals scored.

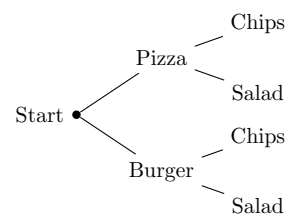
Match	Goals Scored
Match 1	3
Match 2	1
Match 3	4
Match 4	0
Match 5	2
Match 6	5
Match 7	2
Match 8	3
Match 9	1
Match 10	4

4. State the mode from the following extended list of recorded shoe sizes:

5, 7, 6, 8, 5, 9, 6, 5, 7, 8, 5, 6, 5

5. A weather station records daily temperatures over a five-day period: Monday 6°C, Tuesday 9°C, Wednesday 3°C, Thursday 8°C, and Friday 4°C. Calculate the mean daily temperature.

6. Use the tree diagram below, which shows an initial choice of Pizza or Burger, each branching into Chips or Salad, to determine the total number of possible meal combinations.



7. Find the missing value x in the ordered list of seven numbers 5, 9, 14, x , 22, 28, 35 given that the median is 18.

8. The extended two-way table below lists sports preferences across different year groups. Complete the missing entry for x where the total number of students equals 120.

Sport	Year 7	Year 8	Year 9
Football	22	18	15
Rugby	14	x	16
Cricket	10	12	13
Total	46	40	34

9. The table below shows item prices and quantities bought for a school stationery order. Calculate the total expenditure using $\frac{\text{Total Cost}}{\text{Items}}$.

Item	Quantity	Unit Price (£)
Pen	12	1.25
Notebook	6	2.50
Calculator	4	8.00
Geometry Set	5	3.20

10. The grouped frequency table below records time durations in seconds. Calculate the total frequency, and then determine the exact median position index using $\frac{\text{Total Frequency} + 1}{2}$.

Time Interval (t)	Frequency
$0 < t \leq 10$	4
$10 < t \leq 20$	11
$20 < t \leq 30$	15
$30 < t \leq 40$	10

Answers & Worked Solutions

1. 14
(ordered: 3, 6, 7, 8, 11, **14**, 15, 19, 22, 25, 31).
2. 14.5
 $\left(\frac{116}{8}\right)$
3. 25 goals
(3 + 1 + 4 + 0 + 2 + 5 + 2 + 3 + 1 + 4).
4. 5
(appears 5 times).
5. 6°C
 $\left(\frac{30}{5}\right)$
6. 4 outcomes
(2 × 2).
7. $x = 18$
(middle value is 4th term).
8. $x = 10$
(40 – 18 – 12).
9. 79.00
(12 × 1.25) + (6 × 2.50) + (4 × 8.00) + (5 × 3.20).
10. Total 40; Index 20.5
 $\left(\frac{40 + 1}{2}\right)$