

The **mode** is a type of average (sometimes it is called the **modal** average). It is the value that occurs the **most** often. Sometimes there will be **no mode**. Sometimes there might be **more than one mode**.

Examples: Find the mode of these data sets

- a) 5, 7, 9, 7, 4, 3, 2 Mode = 7
- b) 2, 9, 6, 8, 1, 11 No Mode (because each value occurs only once)
- c) 4, 7, 8, 3, 2, 7, 4 Mode = 4 and 7 (because both values occur twice)

Exercise:

1. Seven students entered a chess tournament. Their ages were: 8, 13, 11, 9, 10, 11, 12. Find the mode of their ages. **11**
2. The number of goals conceded in six matches was: 3, 0, 3, 3, 2, 1. What was the mode? **3 goals**
3. A cricketer plays for 14 seasons. The number of centuries she scored each season are 3, 4, 0, 2, 4, 5, 3, 1, 2, 4, 2, 0, 1, 2. Find her modal number of centuries. **2 centuries**
4. The number of caps nine rugby players had was recorded: 81, 12, 41, 91, 23, 9, 37, 52, 4. What was the mode? **No mode**
5. The weight of six babies (in kg) was recorded: 3.6, 3.1, 2.8, 4.2, 3.6, 3.1. What was the modal weight? **3.1 kg & 3.6 kg (two modes)**
6. Overnight snowfall in ten Canadian towns was measured (in cm): 12, 14, 7, 12, 18, 4, 19, 15, 12, 14. What was the modal snowfall? **12 cm**
7. Bella scored 68%, 74%, 91%, 74%, 51% and 66% in six end of term tests. What was the mode? **74%**
8. The number of goals scored by a footballer in 20 matches was 2, 2, 1, 1, 3, 0, 0, 2, 3, 1, 2, 2, 4, 0, 2, 0, 3, 1, 1, 1. Find the modal number of goals scored. **1 goal and 2 goals (2 modes)**
9. Mai records the number of tries scored in ten rugby matches. The first nine entries are 3, 5, 3, 4, 4, 4, 3, 6, 5. Mai loses her recording of the last result, but remembers noticing that there was only one mode and that it was an even number of tries. How many tries must have been scored in the last game and what was the mode? **4, 4**
10. Kit's class gets tested on ten spellings every Monday. Over the last three weeks he's achieved a median of 7, a range of 2 and a mode of 7 in his spelling tests. What are the two possibilities for his scores in the three spelling tests? **7, 7, 9 or 5, 7, 7**