



S3 / S4

# Statistics

L3MS

11

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## Data Calculations: Finding the Mode (Most Common Score)

Looking at any data display graph can tell you a lot about the data, but there are some calculations you can do that will give you more information about the data. The **mean** and **median** are two calculations you can do, but sometimes the most common score is helpful to know.

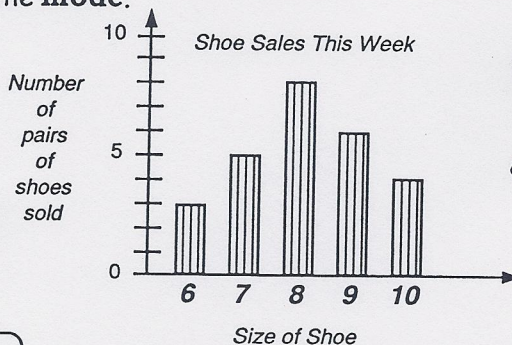
The most common score is called the **mode**.

From a data display you may be able to work out the **mode**.

*Example:*

At a local shoe shop, the owner records the size of each pair of shoes sold. This data is shown in the column graph.

Answer: The **mode** or most common size of shoe sold was size 8, the tallest column in the graph.



Note: There may be more than one **mode**, or **NO mode** if all scores are different.

*Example:*

For the scores 4, 5, 5, 6, 7, 7, 8

both 5 & 7 are **modes**.

For the scores 2, 3, 5, 6, 7, 8, 9

there is no **mode**.



### Task 19

Find the **mode** (most common score) for each list of scores below. (Remember there may not be one)

1. 1, 2, 3, 7, 6, 3

2. 6, 8, 7, 6, 5, 9, 10

3. 6, 9, 7, 5, 6, 3, 8, 7

4. 6, 4, 8, 3, 7, 11, 12, 9

5. 6, 8, 10, 9, 10, 8, 9, 5

6. 7, 6, 9, 2, 7, 5, 3, 9, 6, 7

7. 3, 6, 8, 2, 4, 6, 9, 3, 2, 4

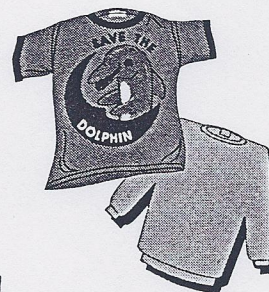
8. 6, 9, 5, 2, 3, 7, 6, 9, 4, 6

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



Every time a T-shirt is sold, its size is noted. During the morning these T-shirts were sold.

size 8, size 10, size 8, size 8, size 10, size 12, size 10, size 12, size 14, size 10, size 8, size 10, size 12, size 10, size 12, size 12, size 8, size 10

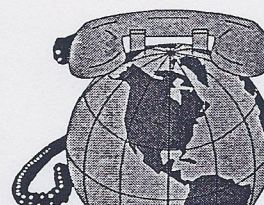


- Organise the data into a **tally chart**.
- Use your tally chart to find the **mode** or most common size of T-shirt sold.
- Why would it be helpful for a shop-keeper to record this information?

During the weekend toll calls are only \$5.00 and you can talk for as long as you like. In the box below are the length of twenty tolls to the nearest minute.



15, 16, 20, 14, 16, 22, 36,  
42, 20, 32, 45, 46, 37, 34,  
26, 14, 20, 36, 24, 36



- Find the **mode** or most common time for a toll call.