

# Football: Mean, Median and Mode

## Introduction

Two teams, Melbourne Victory FC and Sydney FC, have played fifteen games in the A-League this season.

The data below show how many goals the teams scored in their matches.

There are six different collections of data. Three show the results for Melbourne Victory and three show the results for Sydney FC.

Use your knowledge of mean, median and mode to match the data to the teams.



## Data Collections

### #1

The mode of the number of goals scored by Melbourne Victory FC is one more than the mean number of goals they scored.

The mean number of goals scored by Melbourne Victory FC is equal to the median number of goals they scored.

### #2

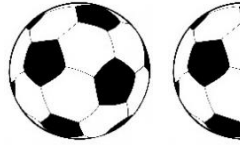
The mode of the number of goals scored by Sydney FC is one less than the mean number of goals they scored.

The mean number of goals scored by Sydney FC is equal to the median number of goals they scored.

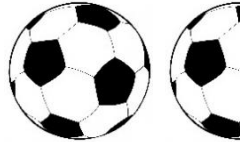
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**#3**

Zero goals



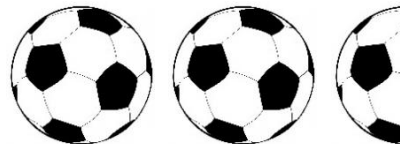
One goal



Two goals



Three goals



Four goals



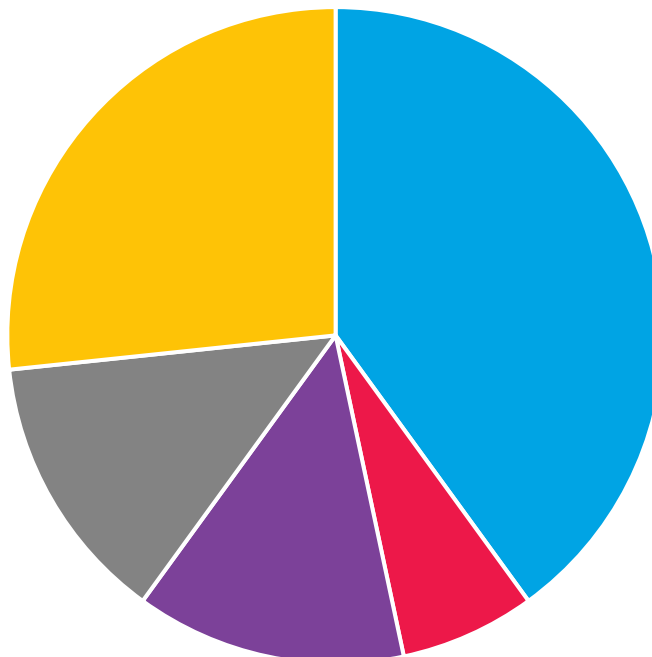
A pictogram to show the number of goals scored in the 15 matches



Represents two matches

**#4**

The Pie chart shows the number of goals scored in the 15 matches



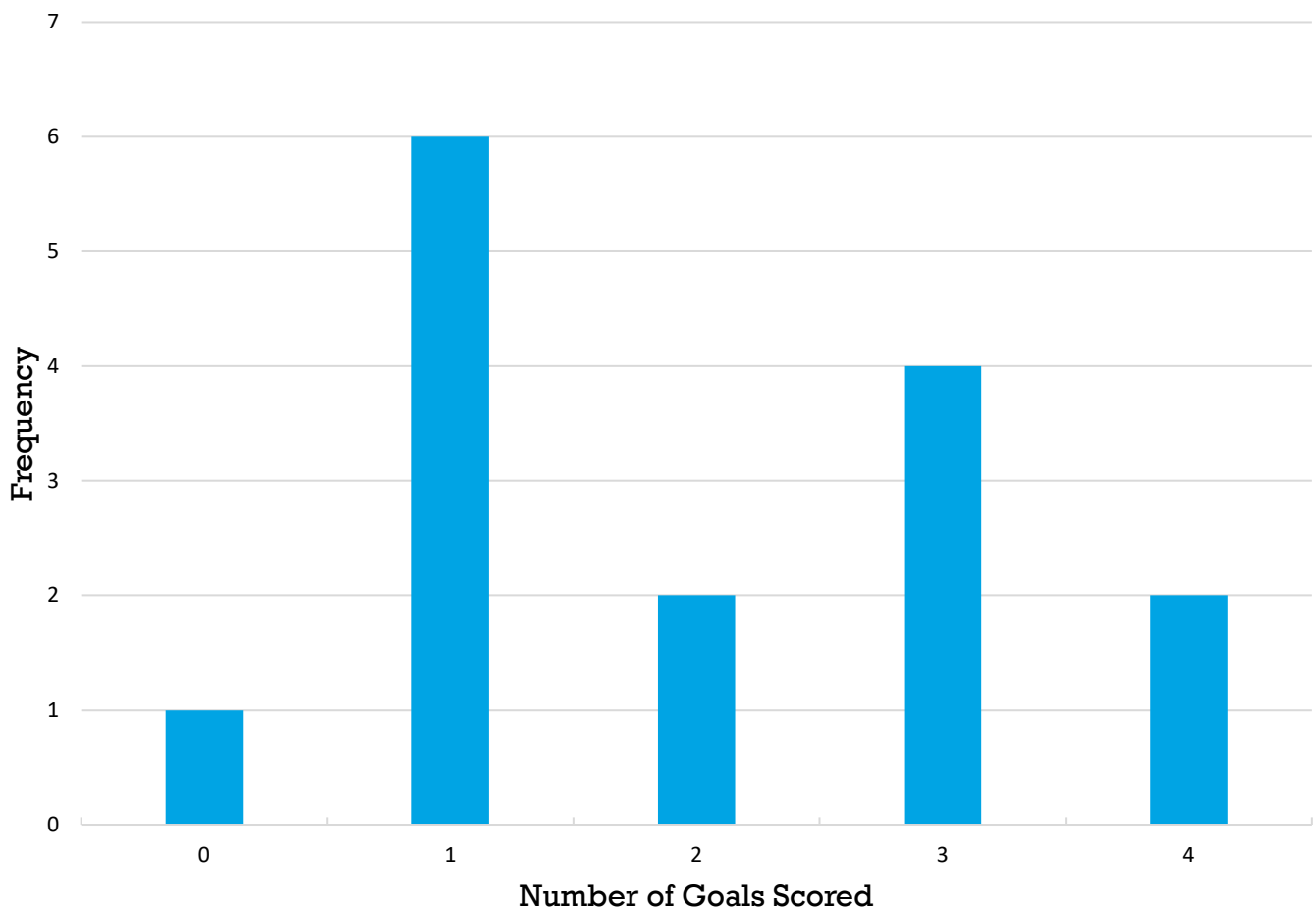
- 1 Goal
- 0 Goals
- 2 Goals
- 4 Goals
- 3 Goals

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#5

Number of goals	Tally
0	III
1	III
2	II
3	HHH
4	II

#6



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## Conclusion

1. Complete the table below to show which three data collections belong to each football club. Place an 'X' in three boxes for Melbourne FC and three boxes for Sydney FC.  
*(Clue: It should be much more obvious which club collections #1 and #2 belong to than the other data collections.)*

	#1	#2	#3	#4	#5	#6
Melbourne Victory FC						
Sydney FC						

2. How did you work out the mean for each club? Show your working in the box below.

Melbourne Victory FC Mean Number of Goals =

Sydney FC Mean Number of Goals =

3. How did you work out the mode for each club? Show your working in the box below.

Melbourne Victory FC Mode Number of Goals =

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Sydney FC Mean Mode Number of Goals =

4. How did you work out the median for each club? Show your working in the box below.

Melbourne Victory FC Median Number of Goals =

Sydney FC Median Number of Goals =

## Extra Challenge

Try to come up your own version of this problem using different teams, or even a different sport. Challenge your family, or classmates to solve the problem you design!

## Notes

Reference: This resource is taken from one of the excellent NRICH problems from University of Cambridge in the UK. <https://nrich.maths.org/>.

It has been modified and adapted to suit the Australian Curriculum and Australian A-League Football.