

What are class limits and how can they be determined? Can you provide examples?

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Class limits refer to the numerical boundaries that define the upper and lower limits of a particular class or category in a data set. They can be determined by using a process called class interval or class width, which involves dividing the range of data values into equal intervals. For example, if a data set contains values ranging from 1 to 100, the class width could be determined as 10, resulting in class limits of 1-10, 11-20, 21-30, and so on. Class limits are important in data analysis as they help to organize and group data into meaningful categories for easier interpretation and analysis.

Find Class Limits (With Examples)

In a frequency distribution, class limits represent the smallest and largest data values that can belong to each class.

Each class in a frequency distribution has a lower class limit and an upper class limit:

Lower class limit: The smallest data value that can belong to a class.
Upper class limit: The largest data value that can belong to a class.

The following examples show how to find class limits for different frequency distributions.

Example 1: Finding Class Limits in a Frequency Distribution

Suppose we have the following frequency distribution that represents the number of wins by different basketball teams:

Wins	Frequency
26 - 30	2
31 - 35	3
36 - 40	7
41 - 45	8
46 - 50	4
51 - 55	3
56 - 60	2
61 - 65	1

The lower class limit is simply the smallest possible value in each class:

Wins	Frequency	Lower Class Limit
26 - 30	2	26
31 - 35	3	31
36 - 40	7	36
41 - 45	8	41
46 - 50	4	46
51 - 55	3	51
56 - 60	2	56
61 - 65	1	61

Conversely, the upper class limit is the largest possible value in each class:

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