

CONTINUOUS DATA

No 2 are exactly the same!



Remember, with continuous data, no 2 values are exactly the same

Examples...

The height of each person in a 5 person soccer team
{ 168.2cm , 169.3cm , 174.2cm , 190.2cm , 158.4cm }

Continuous

Distance run by team members in a netball game
{ 1682.5m , 2893.2m , 2653.8m , 1987.6m , 3465.2m }

Continuous

Time taken to run 100m at Olympics.
{ 9.56s , 9.58s , 10.43s , 10.87s , 11.29s }

Continuous

So what do we do with discrete data?

We **organise** it often into class intervals. It wouldn't be possible to do a useful column graph with individual data sets because they're all different!

For Example, take the following data set which represents height of each person in a class of 11 people

{ 139.2cm , 141.3cm , 148.3cm , 153.4cm , 156.5cm , 159.3cm , 159.6cm , 159.8cm , 168.4cm , 169.2cm , 176.5cm }

This data can be organised into a class interval frequency table

Height Interval	Frequency
$130cm \leq \text{height} < 140cm$	1
$140cm \leq \text{height} < 150cm$	2
$150cm \leq \text{height} < 160cm$	5
$160cm \leq \text{height} < 170cm$	2
$170cm \leq \text{height} < 180cm$	1

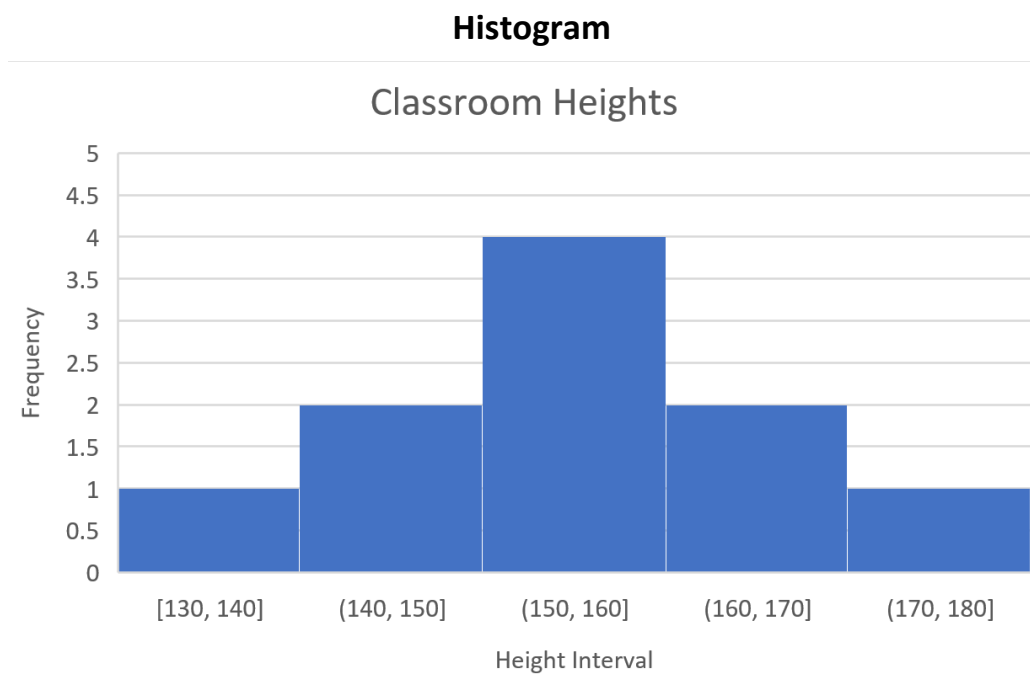


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Can we do more?...

Continuous data, once converted to class intervals, is often displayed with histograms.

Plotting the data from the previous example yields...



"modal class = $150\text{cm} \leq \text{height} < 160\text{cm}$ "



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