

## Displaying Discrete Data

### Starter

1. **(Review of last lesson)** A ship sails on a course of  $202^\circ$ . It returns on the same route. What is its bearing on the return?

### Notes

**Discrete data** is when the information can only take specific values.

**E.g.** red, blue, green or 1, 2, 3

**Continuous data** can take any value within a range

**E.g.** weight or height or time

### **Displaying discrete data – vertical line graphs, bar charts or pie charts**

Collate raw data in a **tally chart** before drawing the graph.

### **Vertical line graph and bar charts**

The height of the line or bar represents the frequency.

- Give the graph or chart a title
- Label your axes
- Give axes a scale
- Have values at equal intervals

### **Pie chart**

The size of the angle represents the frequency.

$$\text{Angle} = \frac{\text{Frequency}}{\text{Total frequency}} \times 360^\circ$$

- Give the pie chart a title “Pie chart to show...”
- Label each area of the pie chart.

**E.g. 1** A pie chart is to be drawn for this data. Calculate the angle for each category.

Colour	Frequency
Red	22
Blue	13
Green	19
Yellow	18

Video: [Vertical line graphs](#)  
Video: [Drawing pie charts](#)  
Video: [Interpreting pie charts](#)

[Solutions to Starter and E.g.s](#)

### Exercise

CIMT 8A p84 Ex 5.1 Qu 1-9

**Summary**

**Discrete data** is when the information can only take specific values.

**Continuous data** can take any value within a range

To display discrete data draw a vertical line graph, a bar chart or a pie chart. Always include a title in the graph or chart.

Pie charts       $\text{Angle} = \frac{\text{Frequency}}{\text{Total frequency}} \times 360^\circ$

