

Name:

Class:

Date:

18.2 Interpreting and drawing pie charts

A pie chart is used to display data to show how an amount is divided or shared. The angles in all the sectors add up to ()°. When you draw a pie chart you must make sure that each sector is () and the () are drawn accurately.

Worked example 18.2

- a 90 people were asked what type of holiday they had last year. The table shows the results of the survey.
- Draw a pie chart to represent the data.
 - What percentage of the people went on a beach holiday?

Type of holiday	Number of people
Activity	32
Beach	27
City break	24
Other	7

Solution: First, work out the ().

()° ÷ () people = ()° per person.

Work out the number of degrees for each sector.

Activity: () × ()° = ()°

Beach: () × ()° = ()°

City break: () × 4° = ()°

Other: () × 4° = ()°

Check the () of all the sectors is ()°.

()° + ()° + ()° + ()° = ()° ✓

Draw the pie chart. Remember to use a () to measure each sector accurately.

Give the pie chart a () and () each ().

- b The pie chart shows where the 90 people went on holiday last year.
- What fraction of the population went to Spain?
 - What percentage of the population went to Greece?
 - How many people went to 'Other countries'?



i	Solution: $(\quad) / (\quad) = (\quad) / (\quad)$	30° out of 360° represents Spain. Cancel the fraction to its simplest form.
ii	$(\quad) / (\quad) \times (\quad) = (\quad)\%$	72° out of 360° represents Greece. Multiply by 100 to get the percentage.
iii	$(\quad) + (\quad) + (\quad) + (\quad) = (\quad)^\circ$ $(\quad) - (\quad) = (\quad)^\circ$ $(\quad) / (\quad) \times (\quad) = (\quad) \text{ people}$	Add up the degrees that are shown for the four countries. Subtract this total from 360° to find out how many degrees are left. 80° out of 360° is for 'Other countries'. Multiply the fraction by 90 to work out the number of people.