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.
- **i** Draw a pie chart to represent the data.
- **ii** 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.
- **i** What fraction of the population went to Spain?
- **ii** What percentage of the population went to Greece?
- **iii** How many people went to 'Other countries'?

i	Solution: ( )/( ) = ( )/( )	30° out of 360° represents Spain. Cancel the fraction to its simplest form.
ii	( )/( ) × ( ) = ( )%	72° out of 360° represents Greece. Multiply by 100 to get the percentage.
iii	( ) + ( ) + ( ) + ( ) = ( )° ( ) − ( ) = ( )° ( )/( ) × ( ) = ( ) 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.