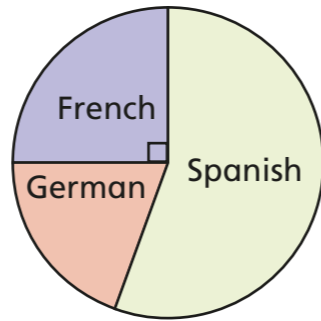
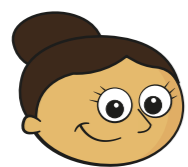


Interpret pie charts using a protractor

1 Each student in a group studies one language. The pie chart shows the languages they study.



- a) What is the most popular language? Spanish
- b) What is the least popular language? German
- c) Dora and Tommy are each writing the fraction of students that study French.



I think it's $\frac{1}{4}$

Dora

I think it's $\frac{90}{360}$



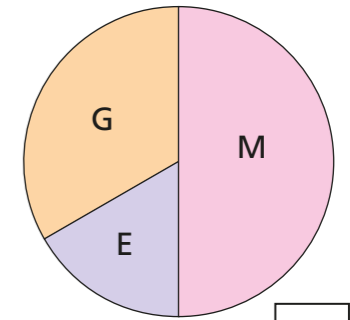
Tommy

Who do you agree with? Both
Explain your answer.

$\frac{1}{4}$ is equivalent to $\frac{90}{360}$



2 The pie chart shows the proportion of monkeys (M), giraffes (G) and elephants (E) in a zoo.

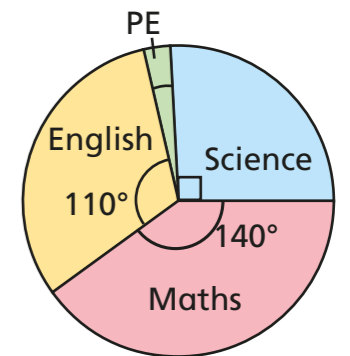


$\frac{1}{2}$

- a) What fraction of the animals are monkeys?
- b) There are 180 monkeys, giraffes and elephants in total. How many monkeys are there?

90

3 The pie chart shows the favourite subjects of the students in a class.



- a) Aisha says, "More students like Maths than like English." Do you agree with Aisha? Yes
Explain your answer.

- b) Is this statement true or false? Give reasons for your answer.
More students like Maths than the other subjects combined.

False

- c) What fraction of students prefer each subject? Give your answers in their simplest form.

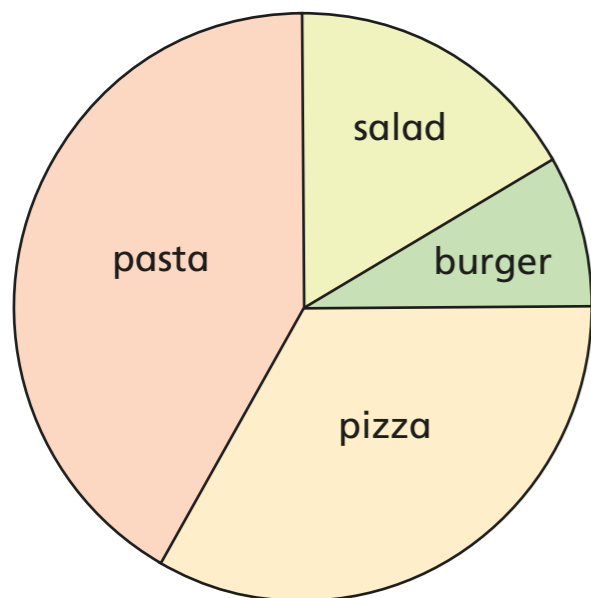
Science $\frac{1}{4}$ Maths $\frac{7}{18}$ English $\frac{11}{36}$ PE $\frac{1}{18}$

- d) There are 36 students in the class. How many students said Science was their favourite subject?

9

4 The pie chart shows the favourite food of 120 people.

The pie chart is drawn accurately.



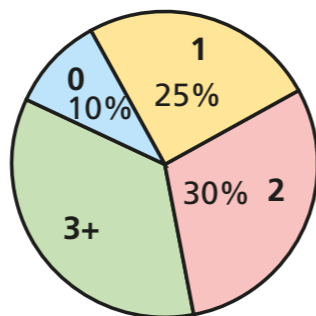
Food	Frequency
salad	20
burger	10
pizza	40
pasta	50

Fill in the frequency table to show how many people chose each food.

5 A group of 500 people were asked how many pets they had.

The pie chart shows the results.

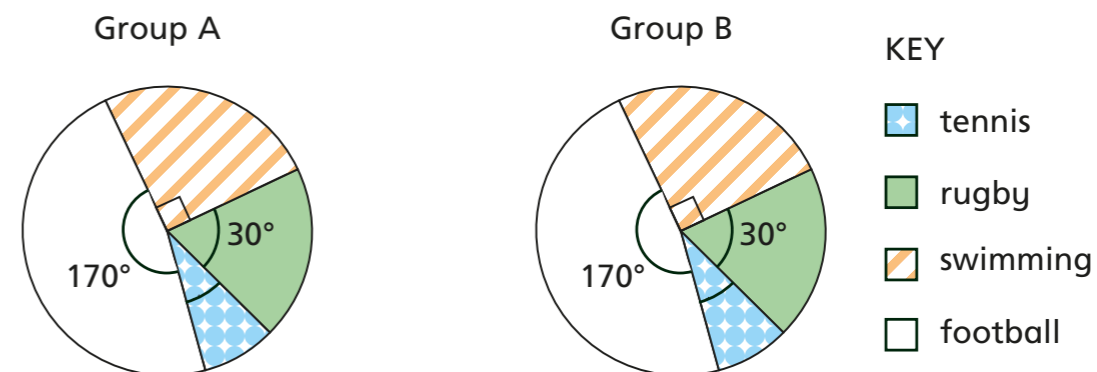
How many more people had 3 or more pets than had 1 pet?



50

Compare methods with a partner. Did you work it out the same way?

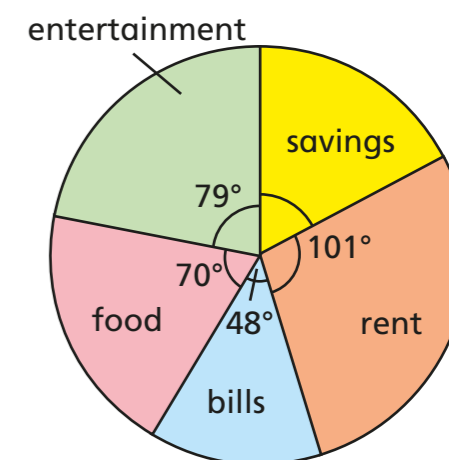
6 Two groups of people were asked to choose their favourite sport.



- What do you notice about the proportions of people who chose each sport in each group?
- There were 540 people in group A. There were three times as many people in group B. How many people in group B said that tennis was their favourite sport?

315

7 The pie chart shows how Mr Hall spends his money in a month. He saves £387.50. How much money does he spend on rent?



£631.25