

Constructing pie charts

Bill makes a list of all the cars in a car park:

Red, silver, black, black, black, red, black, black, red, black

Enter these into the tally chart below.

| Car colour | Tally | Frequency |
|------------|-------|-----------|
| Silver | | 1 |
| Red | | 3 |
| Black | | 6 |

There are 10 cars in total

So we want to divide our pie chart into 10 equal parts

There are 360 degrees in a circle

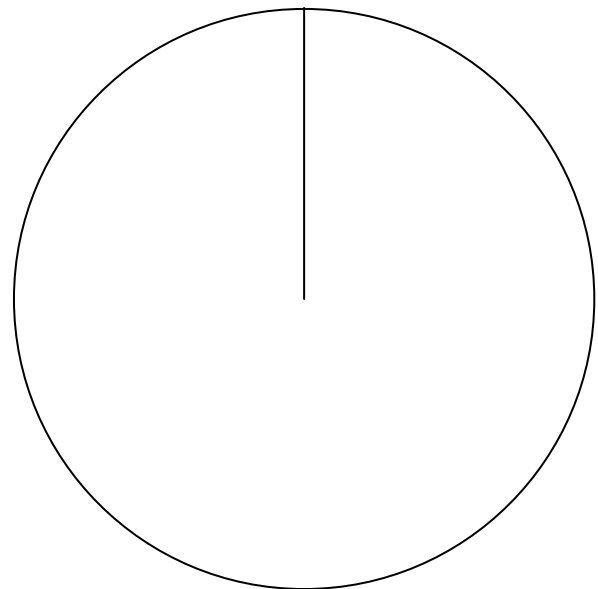
So each car is worth $360^\circ \div 10 = 36^\circ$

Silver slice of pie = $1 \times 36^\circ = 36^\circ$

Red slice of pie = $3 \times 36^\circ = 108^\circ$

Black slice of pie = $6 \times 36^\circ = 216^\circ$

Starting at the vertical line, draw these slices onto the pie chart.



12 people are asked for their favourite crisp flavour. Here are the results:

- 5 ready salted
- 1 prawn cocktail
- 4 salt and vinegar
- 2 cheese and onion

There are 12 people in total
So we want to divide our pie chart into 12 equal parts
There are 360 degrees in a circle

So each person is worth $360^\circ \div 12 = 30^\circ$

Ready salted slice of pie = $5 \times 30^\circ = 150^\circ$

Prawn cocktail slice of pie = $1 \times 30^\circ = 30^\circ$

Salt and vinegar slice of pie = $4 \times 30^\circ = 120^\circ$

Cheese and onion slice of pie = $2 \times 30^\circ = 60^\circ$

Starting at the vertical line, draw these slices onto the pie chart.

