

Constructing Pie Charts

In the car park there is 1 silver car, 3 red cars and 6 black cars.

There are 10 cars in total.

So we want to divide the pie chart into 10 parts.

There are 360 degrees in a circle.

$$360^\circ \div 10 = 36^\circ$$

So each car is worth 36° on our pie chart!

There is 1 silver car, so the silver slice of pie is 36°.

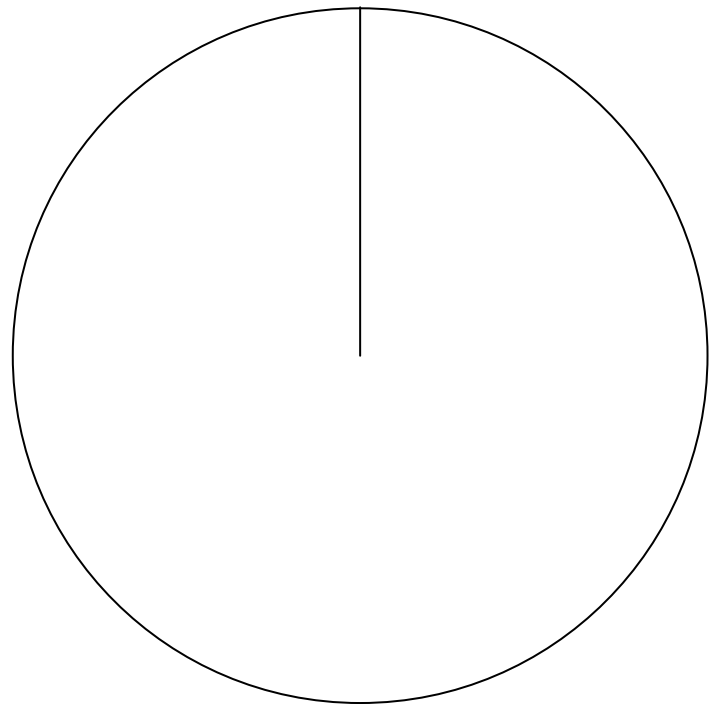
Starting from the vertical line and going clockwise, draw this angle using a protractor.

There are 3 red cars, so the red slice of pie is $3 \times 36^\circ = 108^\circ$.

Measure this angle clockwise from the last line you drew.

There are 6 black cars, so the black slice is $6 \times 36^\circ = 216^\circ$.

Measure this angle clockwise from the last line you drew.



You should now have three slices of pie.

Check that they connect together without leaving any gaps.

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

5 ready salted

1 prawn cocktail

4 salt & vinegar

2 cheese & onion.

There are 12 people in total.

So we want to divide the pie chart into 12 parts.

There are 360 degrees in a circle.

$$360^\circ \div 12 = 30^\circ$$

So each person is worth 30° on our pie chart!

There are five people who said ready salted, so the ready salted slice of pie is

$$5 \times 30^\circ = 150^\circ.$$

Starting from the vertical line and going clockwise, draw this angle using a protractor.

There is one person who said prawn cocktail, so this slice of pie is 30°.

Measure this angle clockwise from the last line you drew.

$$\text{Salt \& vinegar} = 4 \times 30^\circ = 120^\circ$$

$$\text{Cheese \& onion} = 2 \times 30^\circ = 60^\circ$$

Add these two slices to your pie chart as well.

