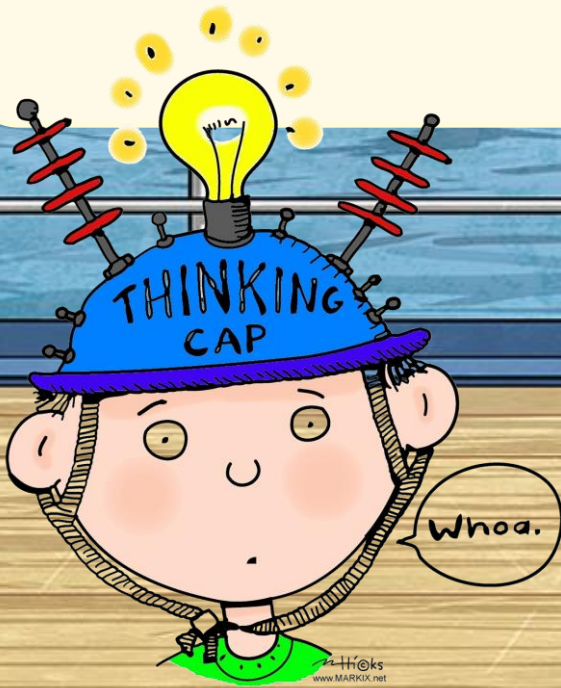


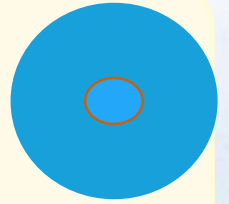
WALT measure angles in a full turn.

WILF:

- Identify different angles
- Recognise one full turn as 360 degrees.
- Find different angles at parts of a turn and a full turn using our angles understandings.

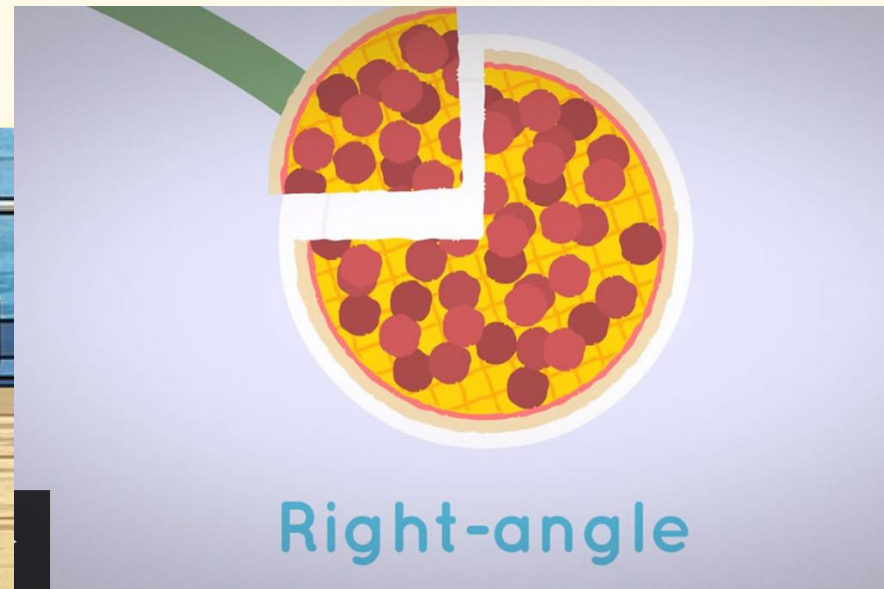


The angle of a whole turn, which looks like a circle, equals 360 degrees. °



We can also find angles at different points in the circle when two lines meet, a bit like a slice of pizza which has yet to be taken out of the full pizza.

Recap on what angles sizes there are by clicking the pizza:



Think of three numbers that have a sum of 360° .



Now think of another set of numbers, and another.

What do all of these numbers have in common when you're thinking about angles?

Can you think of a combination that no-one else will think of?

Challenge: can you think of a combination including decimals?



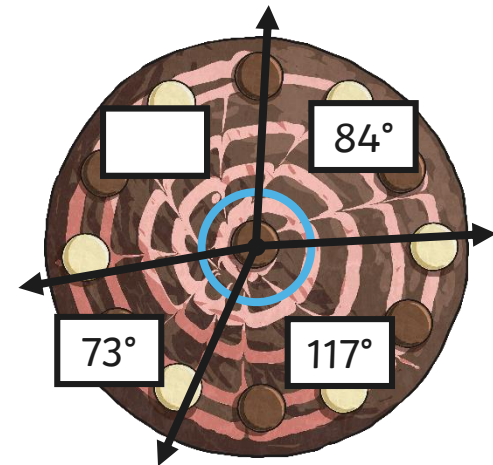
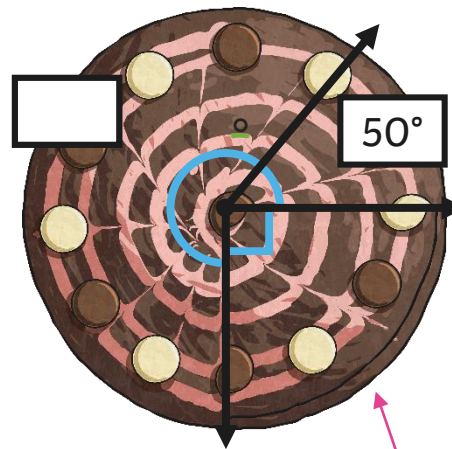
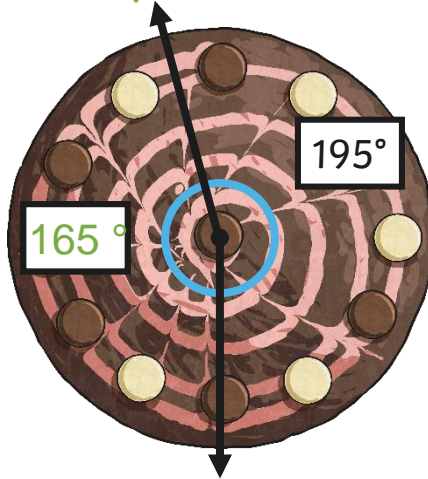
Calculating Angles around a Point

Thinking of how we calculated angles on a straight line, how could we calculate the missing angles on these cakes?



We know that a full turn is 360° , so $360 - 195$ will give me my missing angle.
Try to find the other missing angle by subtracting the given angles from 360° .

Example: $360 - 195 = 165^\circ$



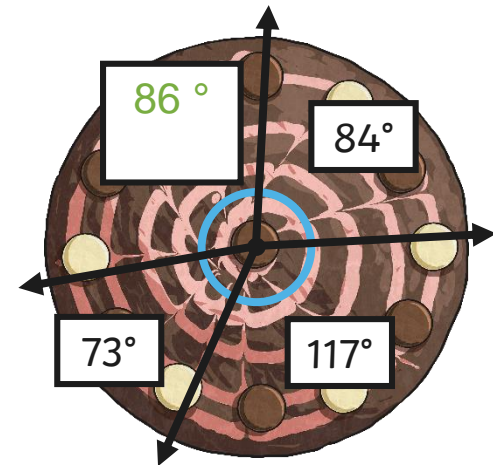
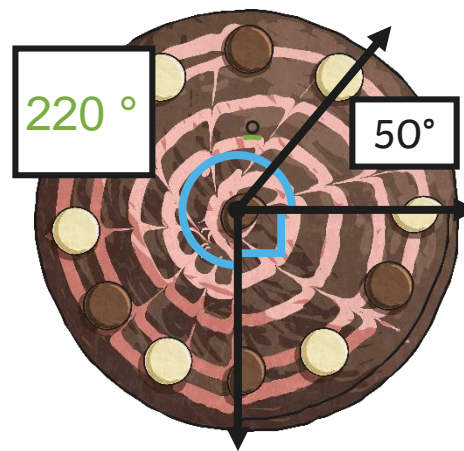
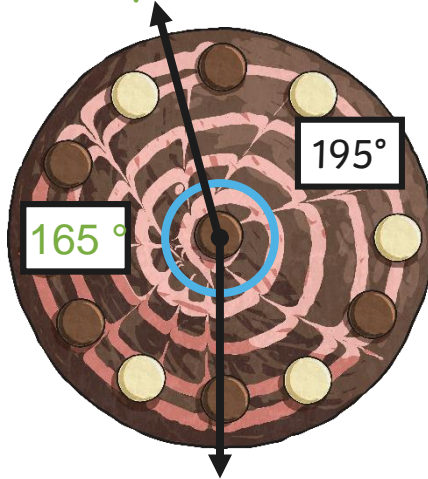
Hint: if an angle looks like the corner of a square it is a..... angle and therefore measures.....

Thinking of how we calculated angles on a straight line, how could we calculate the missing angles on these cakes?



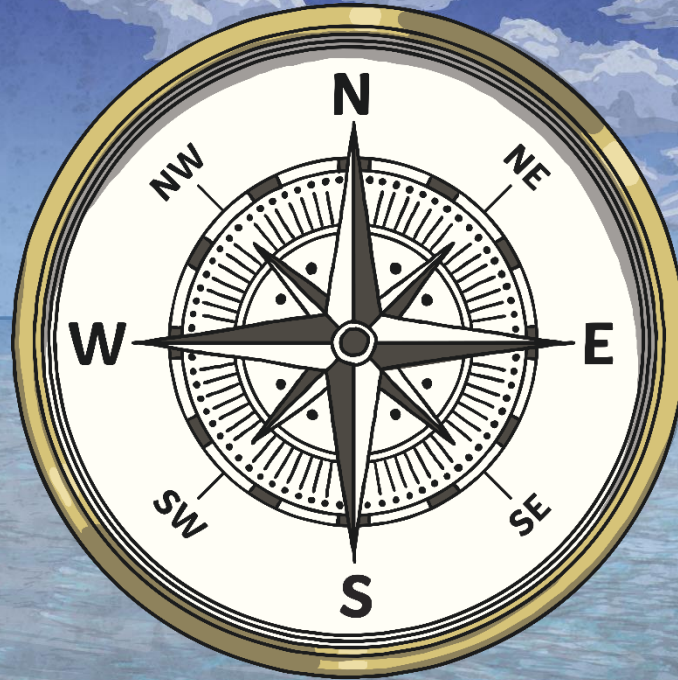
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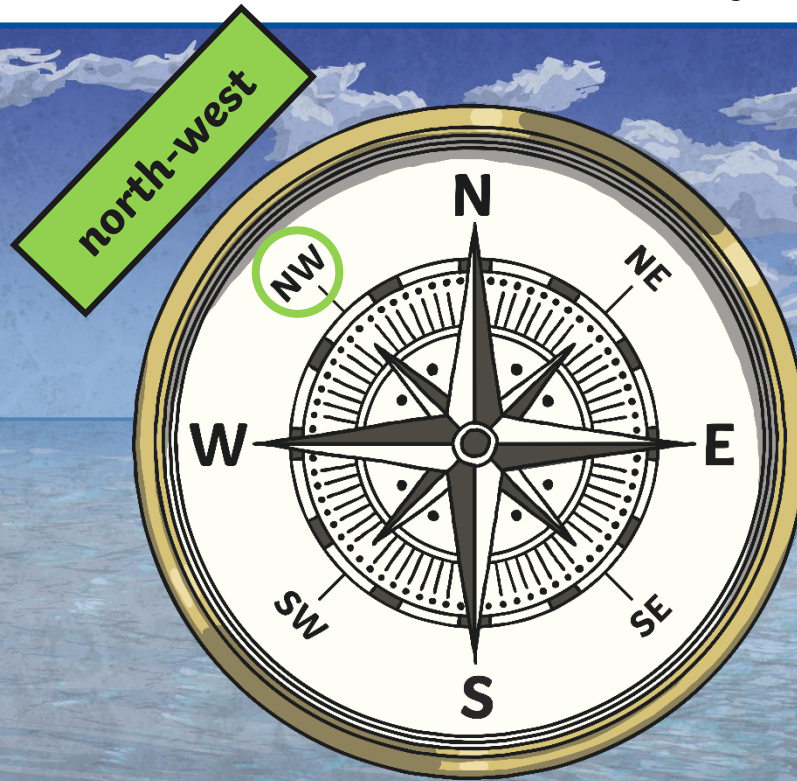
If I was facing south and turned clockwise 270° , then anticlockwise 135° , which direction would I be facing?



Unsure how to do this? Look between North and East – what is the angle? NE will be half of that angle. Each co-ordinate is evenly spaced.




If I was facing south and turned clockwise 270° , then anticlockwise 135° , which direction would I be facing?




Calculating Angles around a Point



True or False?

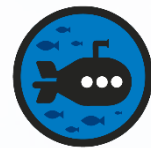
A cartoon illustration of a young girl with dark skin and brown hair in a ponytail, wearing a pink t-shirt. She is shown in profile, facing right, with her mouth open as if speaking.

When the hands of a clock show 3 o'clock, they are at 90° .


A cartoon illustration of a young boy with light skin and orange hair, wearing a teal t-shirt. He is shown in profile, facing left, with his mouth open as if speaking.

Two-thirds of a whole turn is greater than a three-quarter turn.

Calculating Angles around a Point




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When the hands of a clock show 3 o'clock, they are at 90° .

True

A cartoon illustration of a young boy with light skin and orange hair, wearing a teal shirt. He is shown in profile, facing left, with his mouth open as if speaking.

Two-thirds of a whole turn is greater than a three-quarter turn.

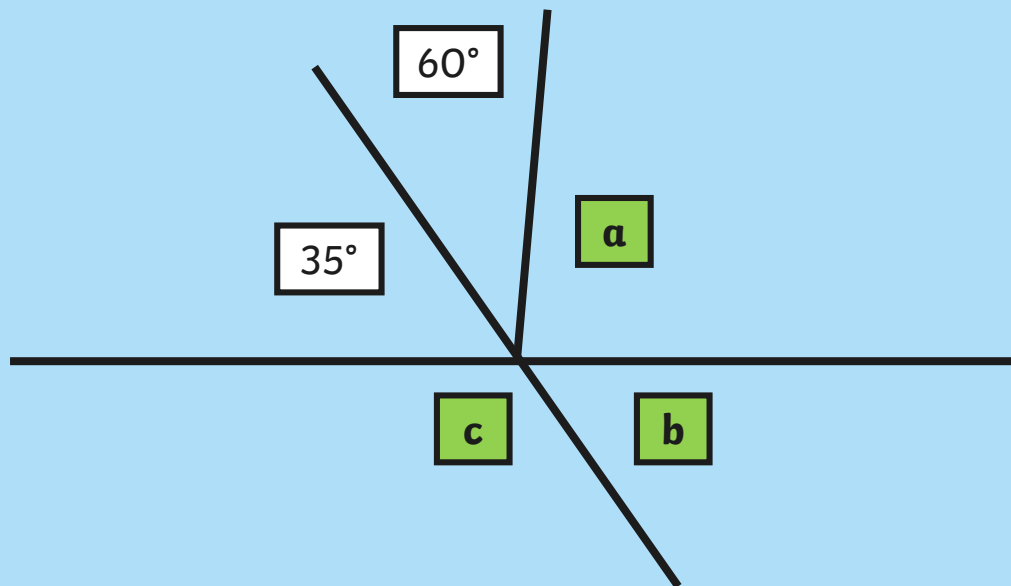
False

Two-thirds of a turn is 240° and a three-quarter turn is 270° .

Calculating Angles around a Point



How would you calculate the missing angles?



a

b

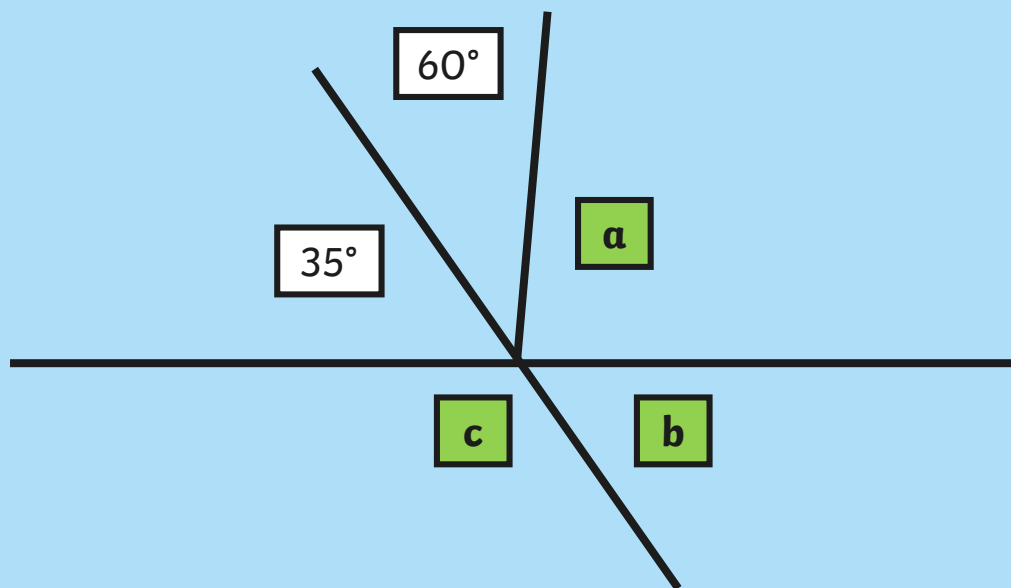
c

Hint: all of the angles together equal a full turn.

Calculating Angles around a Point



How would you calculate the missing angles?

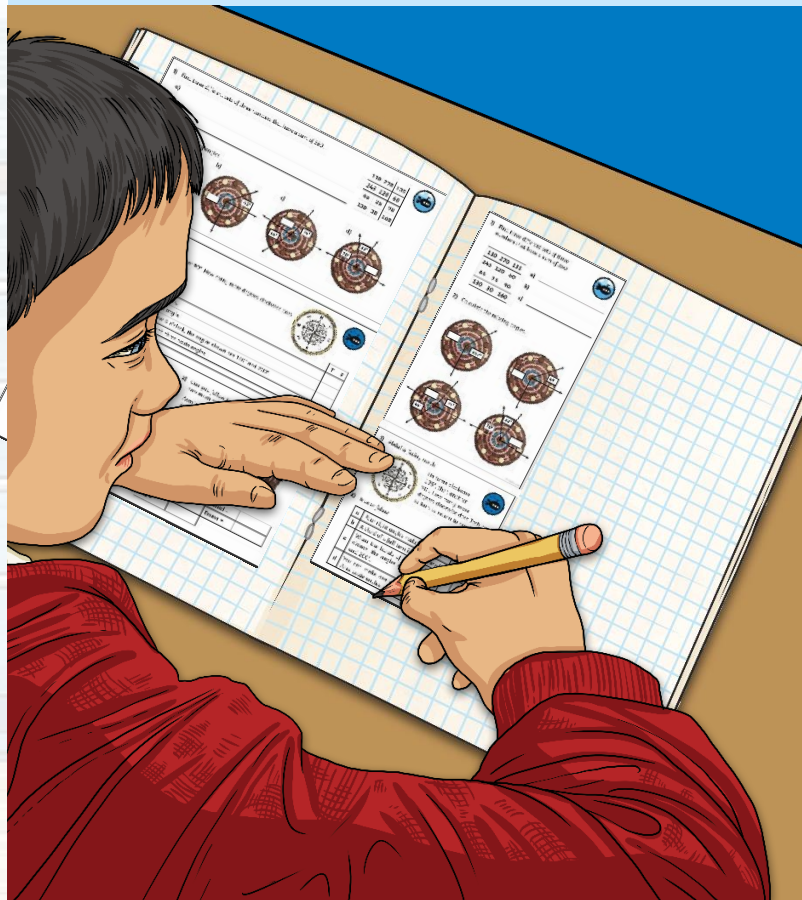


a 85°

b 35°

c 145°

Have a go at today's activity – Week 1. Maths. Thursday Activity.



1) Find three different sets of three numbers that have a sum of 360.

110	270	135
245	120	60
65	25	90
130	30	160

a) _____
b) _____
c) _____

2) Calculate the missing angles.

3) True or false?

a	Four right angles make a full turn.	T	F
b	A third of a full turn is a reflex angle.		
c	When the hands of a clock show 5 o'clock, the angles shown are 160° and 200°.		
d	You can make one whole turn with three acute angles.		

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