

WALT measure angles on a straight line.

WILF:

- Identify different angles.
- Understand that a straight line has angles adding up to $\frac{1}{2}$ a turn (180°)
- Use known facts to measure missing angles on a straight line.

Let's recap our angle sizes....



How many degrees in a right angle?

How many degrees is half a turn?

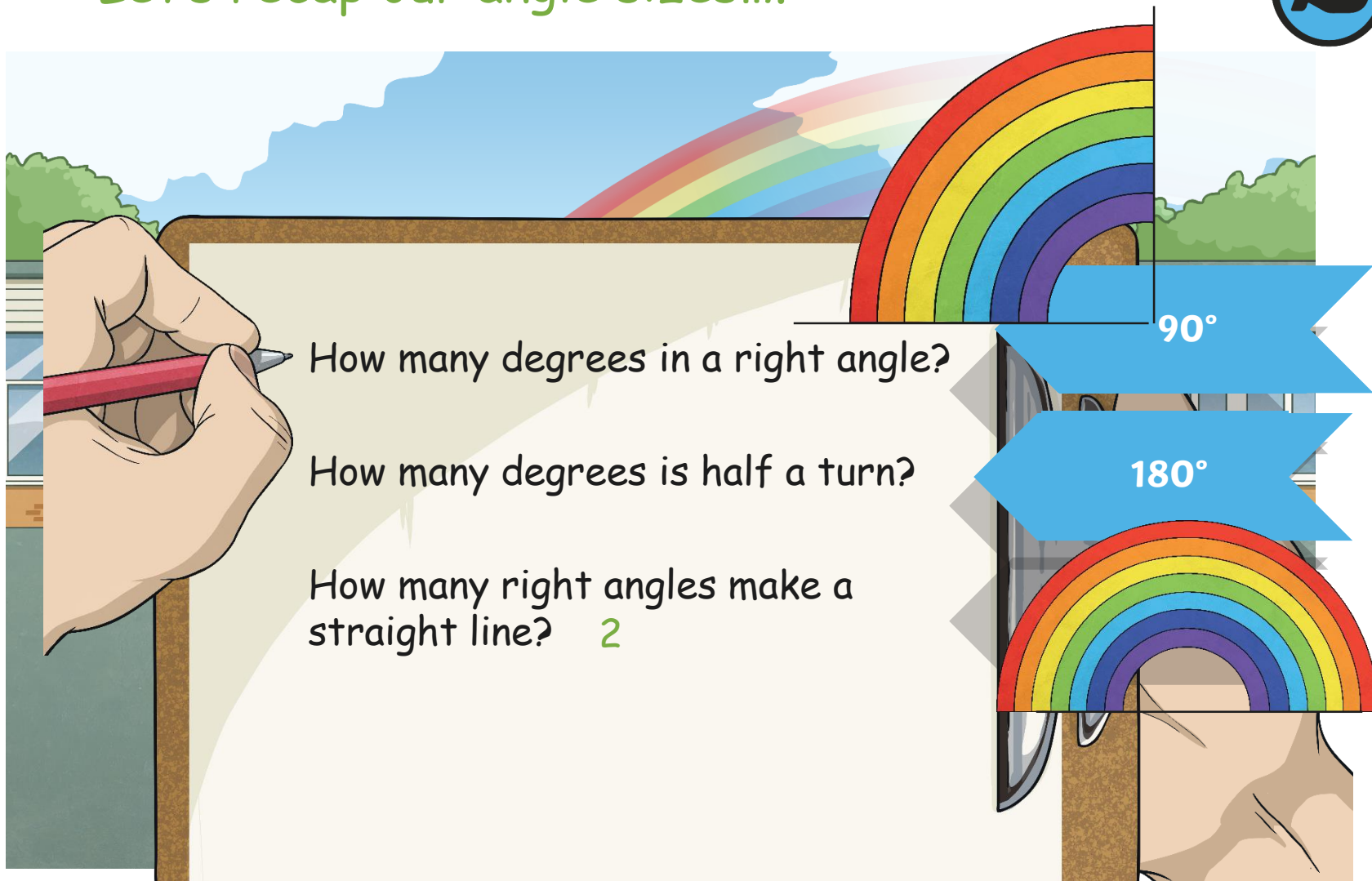
How many right angles make a straight line?

180°

Which angle is which?

90°

Let's recap our angle sizes....



How many degrees in a right angle?

How many degrees is half a turn?

How many right angles make a straight line? 2

90°

180°

Calculating missing angles.

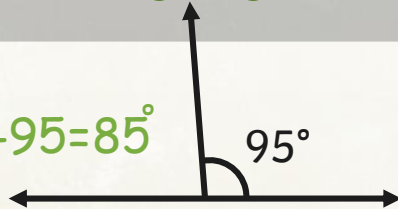


Angles on a straight line always add up to 180° . Because of this, we can use angles we already have to calculate a missing angle.

We do this by subtracting the numbers given from 180° .

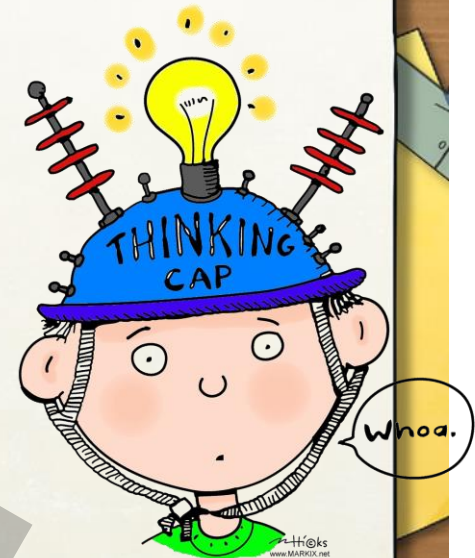
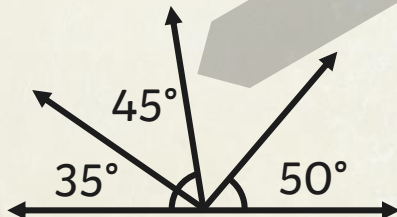
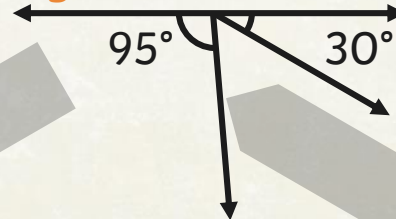
For example, here we have 95° , so we need to calculate $180 - 95$ to find our missing angle.

$$180 - 95 = 85^\circ$$



Can you calculate these two missing angles?

$$\text{e.g.: } 180 - 95 - 30 =$$



Calculating missing angles.

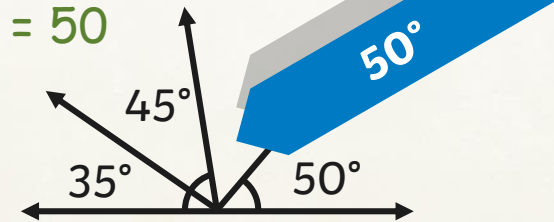


Start with 180 and subtract each number, one at a time.

$$180 - 50 = 130$$

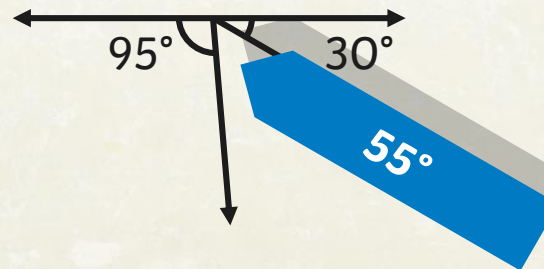
$$130 - 35 = 95$$

$$95 - 50 = 45$$



$$180 - 95 = 85$$

$$85 - 30 = 55$$





Thinking about what we know of different angles, what type of angle is could b?

It must be...

It could be...

It can't be...

a

b

ACUTE



RIGHT



OBTUSE



Confused about the angle types? Re-watch the song by clicking on the picture.

Thinking about what we know of different angles, what could we say about angle b?



It must be...

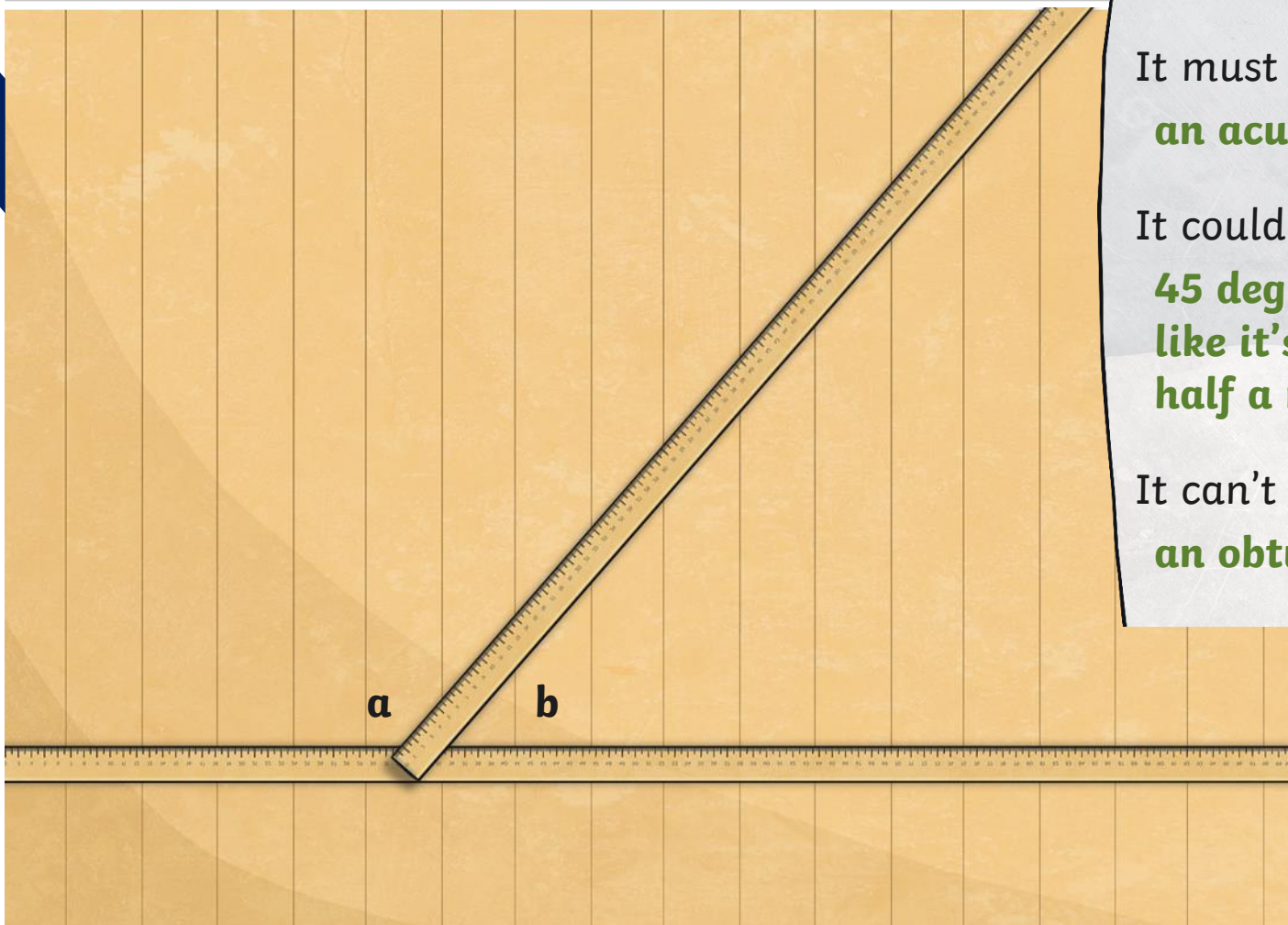
an acute angle.

It could be...

45 degrees as it looks like it's approximately half a right angle.

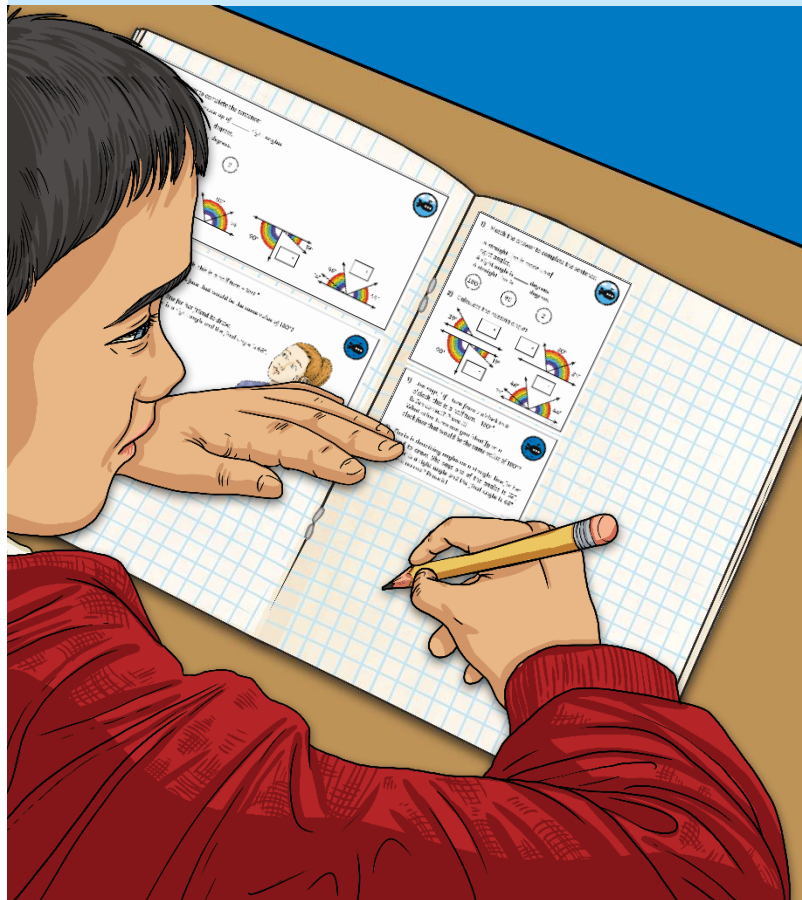
It can't be...

an obtuse angle.



Have a go at today's activity!

Week 1. Maths. Tuesday Activity.



1) Match the

A straight line is made up of _____ right angles.
A right angle is _____ degrees.
A straight line is _____ degrees.

a = _____
b = _____
c = _____
d = _____

2) Calculate the

39°
90°

1) Jen says, "If

o'clock, this is a half turn - 180°".
Is Jen correct? Prove it!
What other turns can you identify on a clock face that would be the same value of 180°?

2) Floria is describing angles on a straight line for her friend to draw.

She says one of the angles is 32°, another is a right angle and the final angle is 68°.
Is Floria correct? Prove it!

1) Calculate the

a = _____
b = _____
c = _____
d = _____

1) Create your

like the one I
Don't forget
and work out

1) Calculate

a = _____
b = _____
c = _____
d = _____

2) Create your

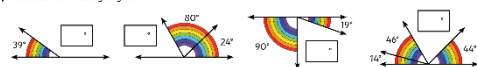
Don't forget

1) Match the answer to complete the sentence:

A straight line is made up of _____ right angles.
A right angle is _____ degrees.
A straight line is _____ degrees.

(180) (90) (2)

2) Calculate the missing angles.



1) Jen says, "If I turn from 2 o'clock to 8 o'clock, this is a half turn - 180°".

Is Jen correct? Prove it!
What other turns can you identify on a clock face that would be the same value of 180°?

2) Floria is describing angles on a straight line for her friend to draw.

She says one of the angles is 32°, another is a right angle and the final angle is 68°.
Is Floria correct? Prove it!

