

Maths Year 5
Angles w/c 29.06.20

The objective we are working on this week is:

- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
- identify angles at a point and one whole turn (total 360°)
- identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)

Monday 29th June

Use the link to help you remember about angles

<https://www.bbc.co.uk/bitesize/topics/zb6tyrd/articles/zg68k7h>

Also use this step by step guide to help you.

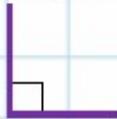
Step 1

An acute angle is an angle between 0° and 89° . It is smaller than a right angle.



Step 2

A right angle is an angle that is exactly 90° and is marked by a square.



Step 3

An obtuse angle is an angle between 91° and 179° . It is bigger than a right angle but smaller than a straight line angle.



Step 4

A straight line angle is exactly 180° .



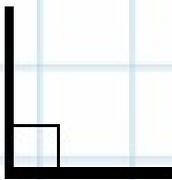
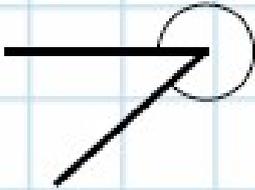
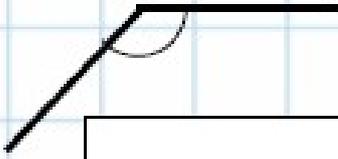
Step 5

A reflex angle is an angle between 181° and 359° . It is bigger than a straight line angle but smaller than a full turn (360°).



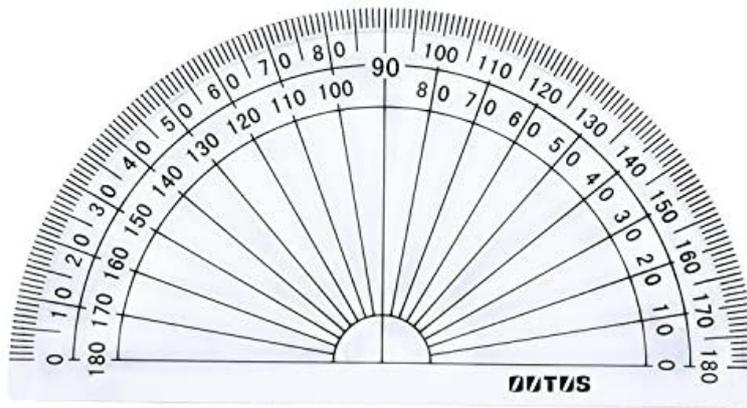
Now have a go at labelling these angles

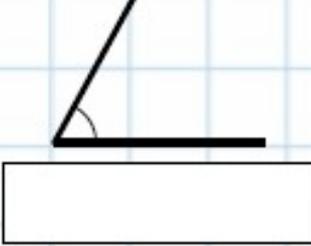
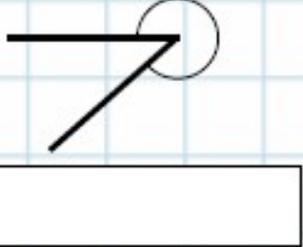
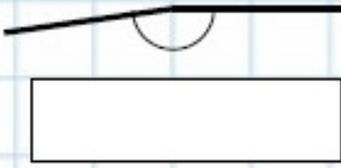
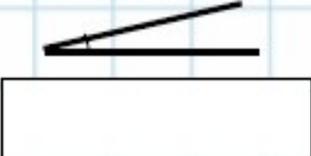
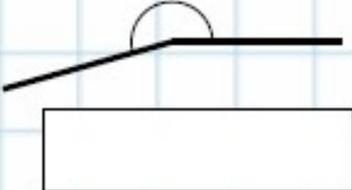
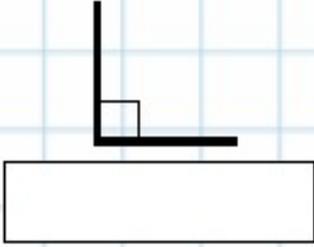
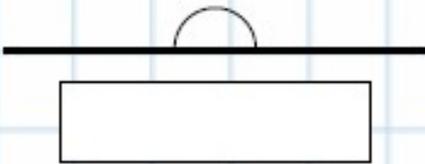
Label the following angles.



Tuesday 30th June

Have a look back at the angles you labelled yesterday. Could you estimate the size of the angle? Here is a picture of a protractor and a web guide to help with your estimating.



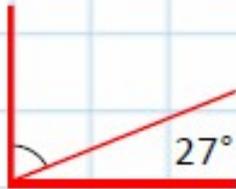
	
	
	
	

Wednesday 1st July

Here is a step by step guide to show you how to find missing angles.

Step 1

To find the missing angles of a right angle, we know that a right angle is exactly 90° , so we add the known values, then subtract from 90° .

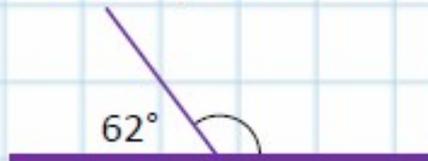


$$90 - 27 = 73$$

So the missing angle is 73°

Step 2

To find the missing angles from a straight line angle, we know that this angle is exactly 180° , so we add the known values, then subtract from 180° .

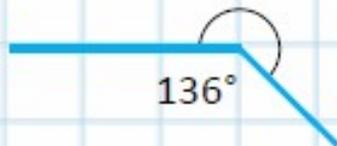


$$180 - 62 = 118$$

So the missing angle is 118°

Step 3

To find the missing angles from a full turn, we know that a full turn is exactly 360° , so we add the known values, then subtract from 360° .



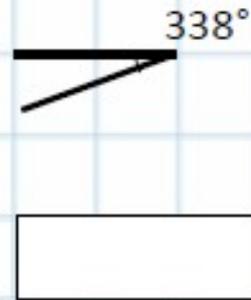
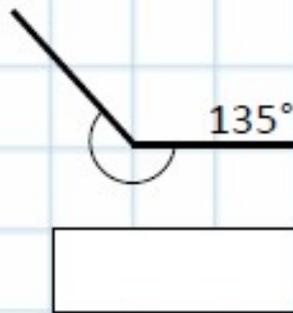
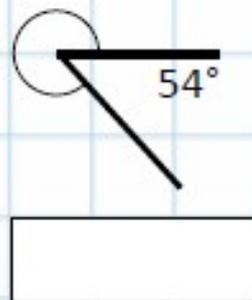
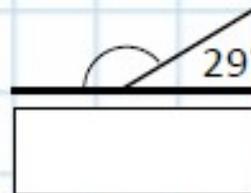
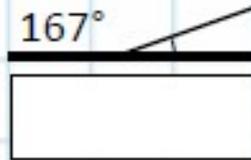
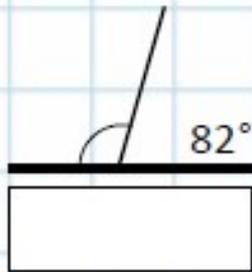
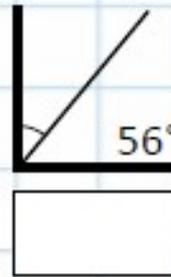
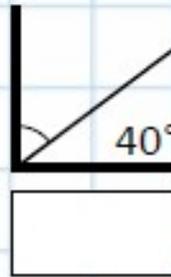
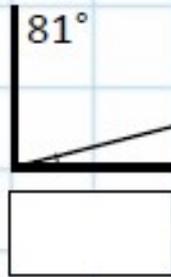
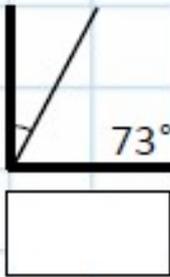
$$360 - 136 = 224$$

So the missing angle is 224°

1. What do angles on a line add up to?
2. What do angles around a point add up to?

Now use what you have learnt to find the missing angles.

Find the missing angles:



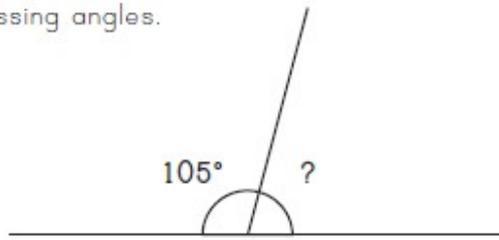
Thursday 2nd July

Write some top tips for finding the missing angle on a line and use them to help you with the activity below.

Here are some angles on a line, can you find the missing angle?

Find the missing angles.

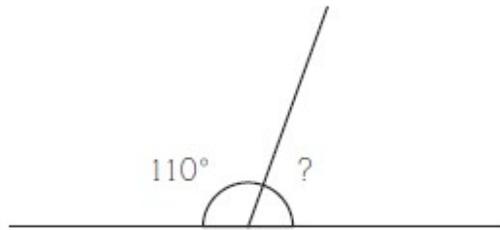
Example:



The missing angle is:

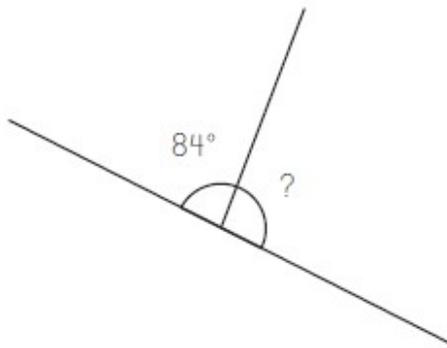
$$180 - 105 = 75^\circ$$

1.



The missing angle is:

2.



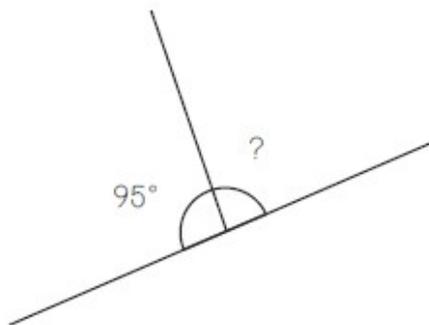
The missing angle is:

3.



The missing angle is:

4.



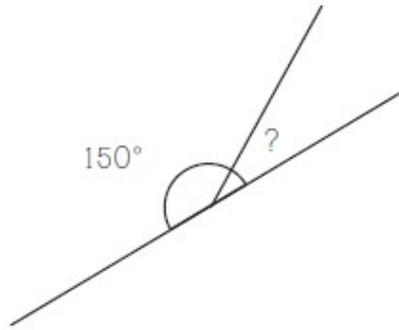
The missing angle is:

5.



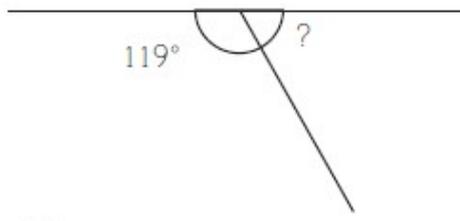
The missing angle is:

6.



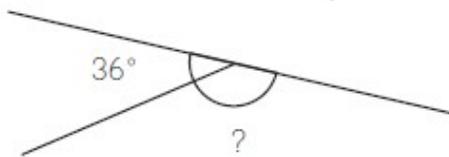
The missing angle is:

7.



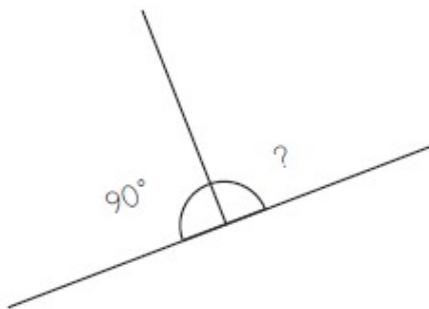
The missing angle is:

8.



The missing angle is:

9.



The missing angle is:

10.



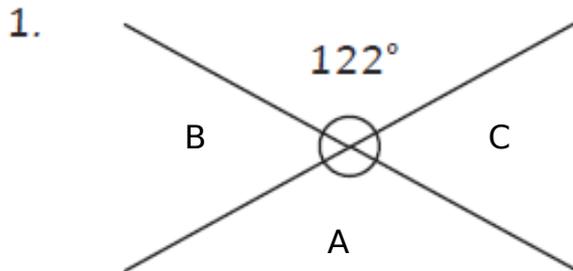
The missing angle is:

Friday 3rd July

Today we will be finding missing angles around a point. **Remember that opposite angles are equal.**

Example:

I know that angles around a point add up to 360°



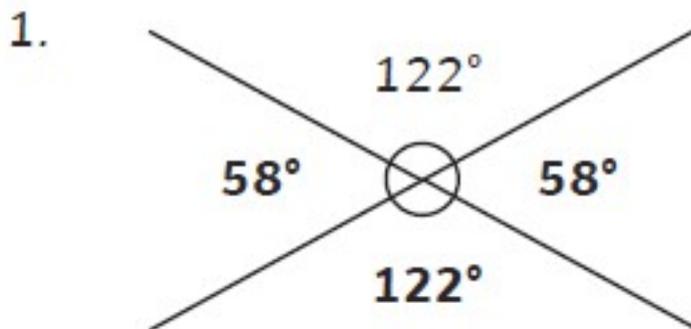
I know that opposite angles are equal so angle $A = 122^\circ$. That also means that angles B and C are going to be the same.

$$122^\circ + 122^\circ = 244^\circ \text{ (Total of the known angle and angle A)}$$

$$360^\circ - 244^\circ = 116^\circ \text{ (Total of angles around a point take away the total of known angle and angle A)}$$

116° is the total of angle B and angle C. As they are the same we have to divide 116° by 2 to find the size of each angle.

$$116^\circ \div 2 = 58^\circ$$



Now have a go at finding these missing angles

