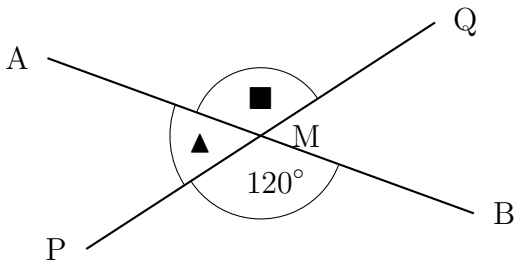


1. Here is a diagram of two straight lines AB and PQ which meet at M



(i) Complete:

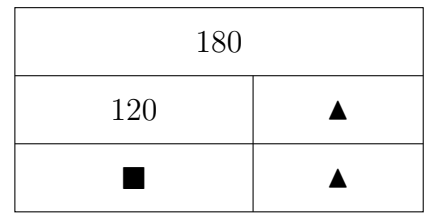
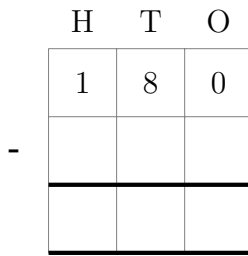
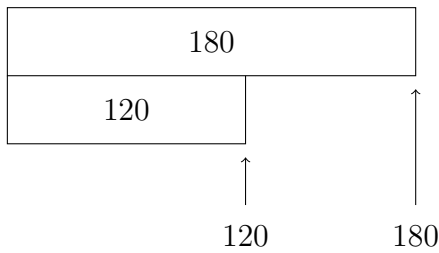
▲ = ... ° because **angles on a straight line add up to 180°**

■ = ... ° can have 2 possible reasons

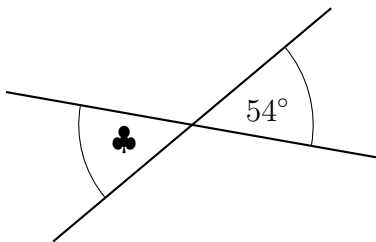
1. for ▲ **angles on a straight line add up to 180°**, then for ■ **angles on a straight line add up to 180°**

2. the quick way: **vertically opposite angles are equal**

You may use these diagrams to help calculate ▲ and ■



Here are two straight lines which cross.



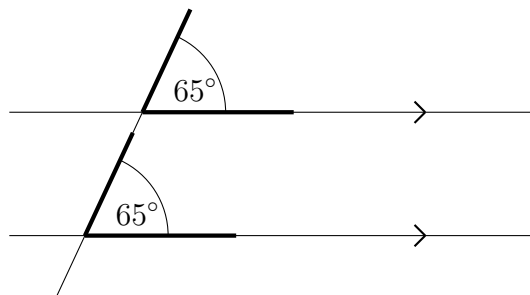
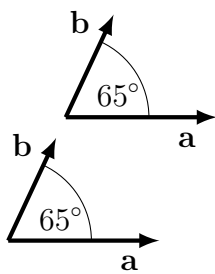
(ii) Complete:

♣ = ... ° because

.....

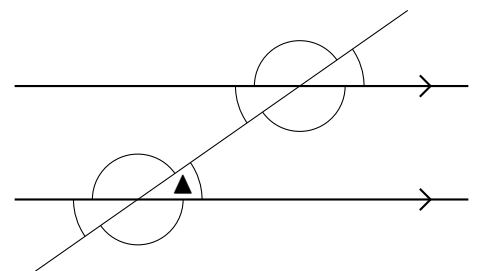
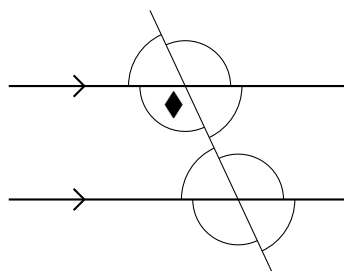
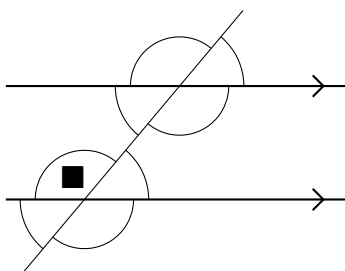
.....

2. The angle between the vectors **a** and **b** is 65°



This pattern of equal angles between a line and parallel lines is called corresponding.

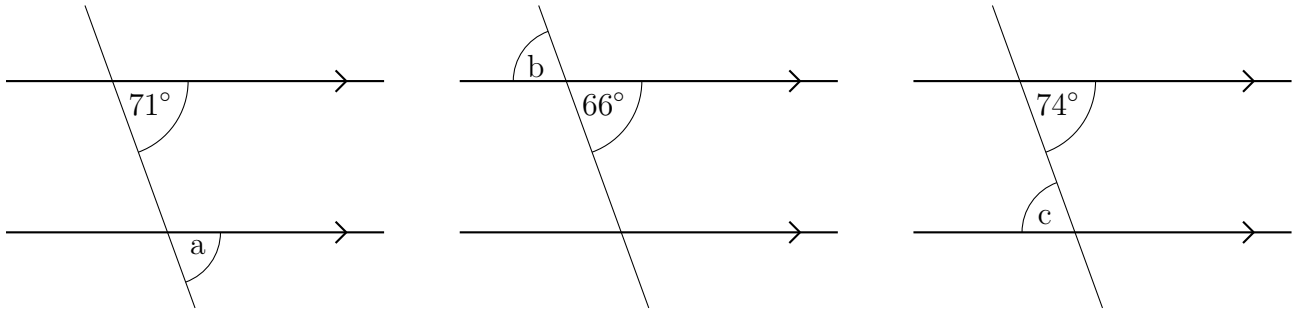
Draw the correct symbol on the angles corresponding to ■, ◆ and ▲



3.

3. not written yet

4. Complete



FYI You may use: alternate, corresponding or vertically opposite to complete the reasons

angle $a = \dots^\circ$ because are equal

angle $b = \dots^\circ$ because are equal

angle $c = \dots^\circ$ because are equal

5.

5. not written yet

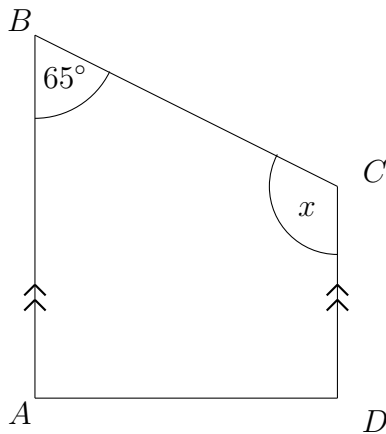
6.

6. not written yet

7.

7. not written yet

8.



(i) Work out the size of the angle marked x.

.....^o

(ii) Give a reason for your answer

.....

.....