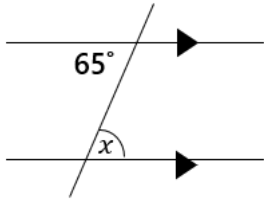


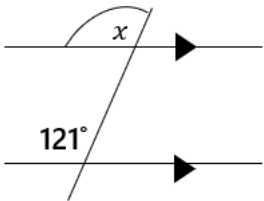
ANGLES IN PARALLEL LINES

Task 1 – For each of the following, work out the size of the angle x . Give a reason for your answer.

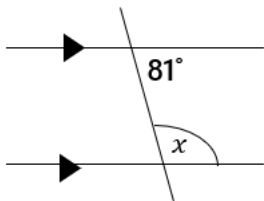
1)



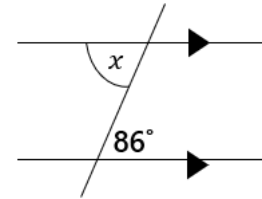
2)



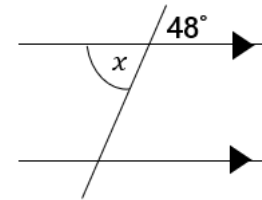
3)



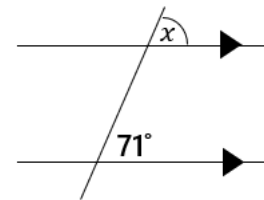
4)



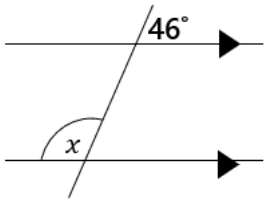
5)



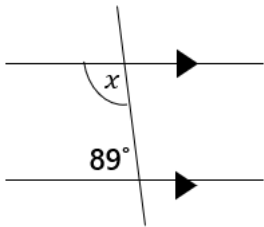
6)



7)



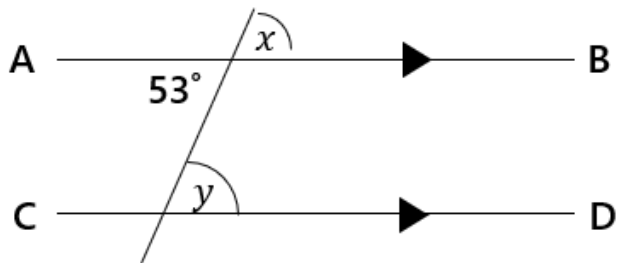
8)



Task 2 – Note that for each of the following questions, the diagrams are not drawn accurately.

9) AB and CD are parallel lines.

Work out the size of the angles x and y .

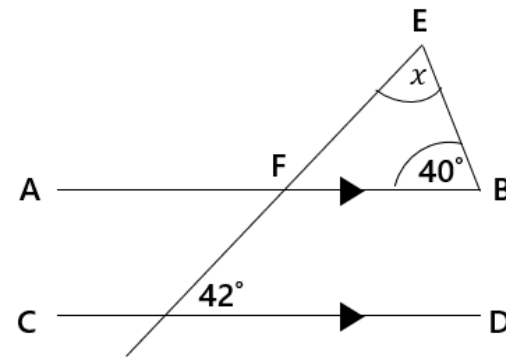


Give reasons for your answers.

10) AB and CD are parallel lines.

FEB is a triangle.

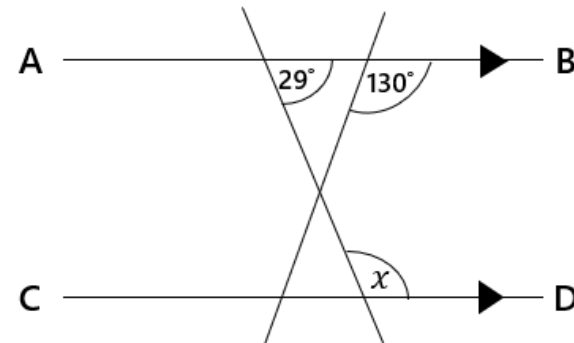
Work out the size of the angle x .



Give a reason for each stage of your working.

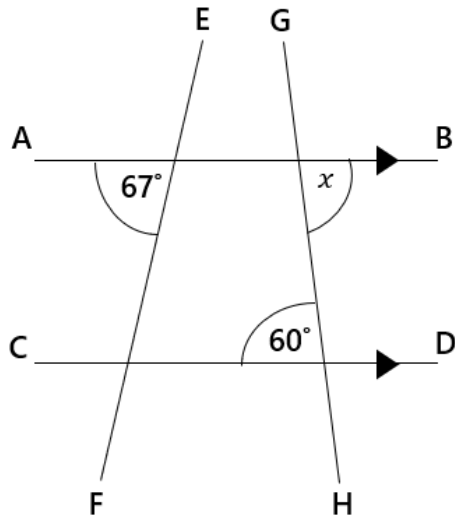
11) AB and CD are parallel lines.

Work out the size of the angle marked x .



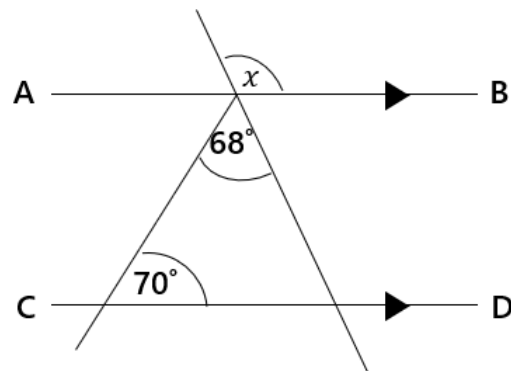
Give two reasons for your answer.

12) AB and CD are parallel lines. Work out the size of the missing angle x .



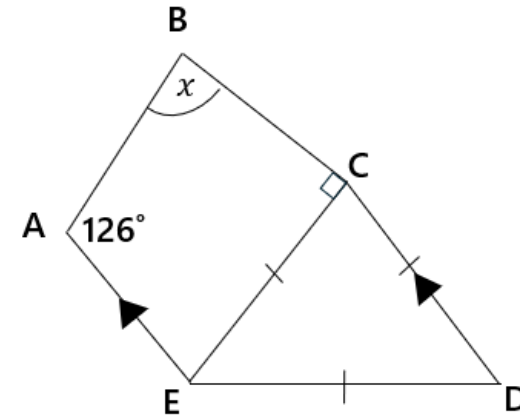
Give a reason for your answer.

13) AB and CD are parallel lines.
Work out the size of the angle marked x .

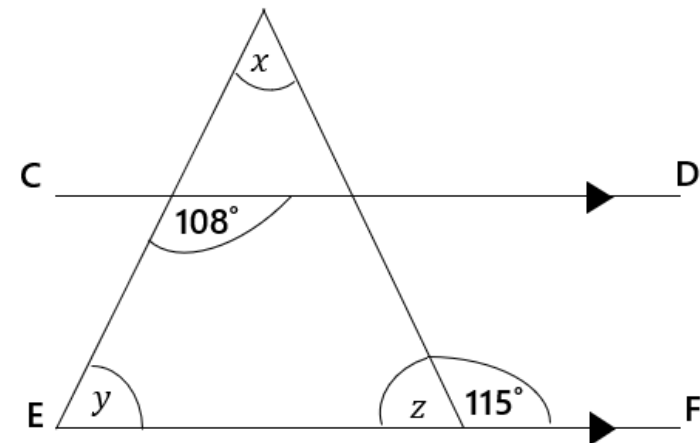


Give a reason for each stage in your working.

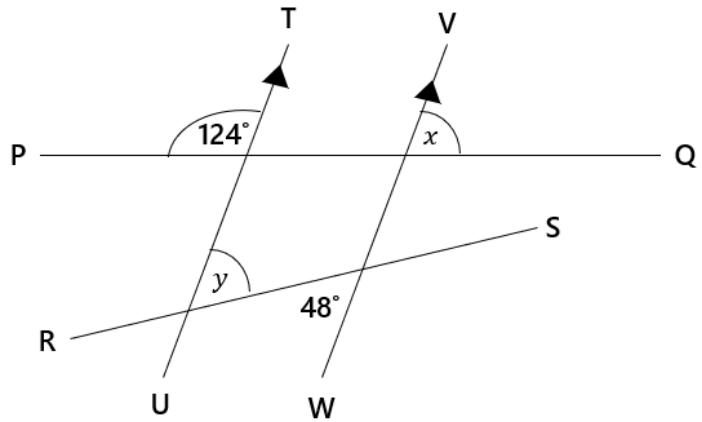
14) ABCE is a quadrilateral and CED is a triangle. Work out the size of the missing angle x . You must show all your working.



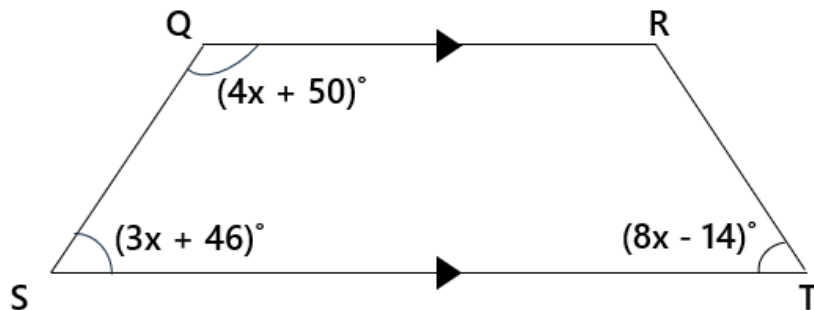
15) The lines CD and EF are parallel. Work out the size of the missing angles x , y and z . You must show all your working.



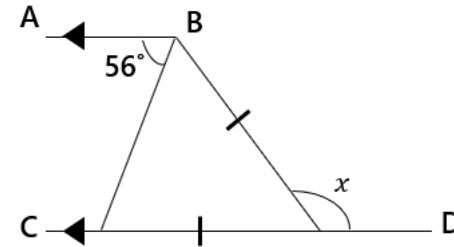
16) The lines TU and VW are parallel. Work out the size of the missing angles x and y . Give reasons for your answers.



17) QRST is a trapezium. Work out the size of the smallest angle in the trapezium.

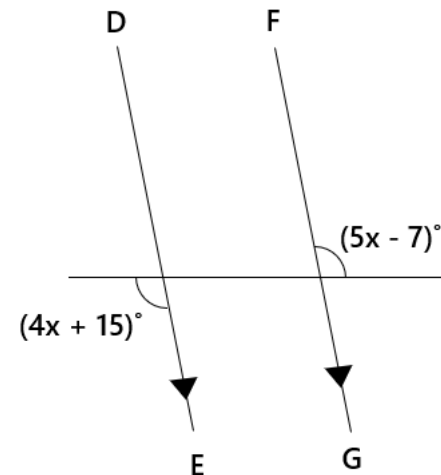


18) AB and CD are parallel lines. Work out the size of the missing angle x .



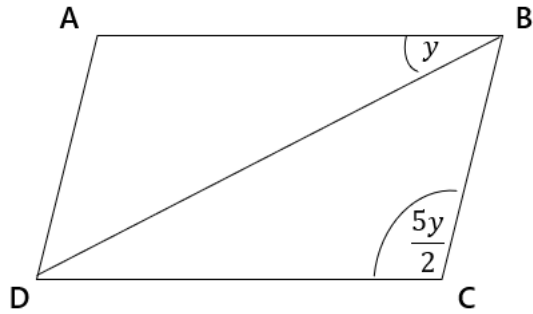
Give a reason for each stage in your working.

19) DE and FG are parallel lines. Solve for x .



Challenge

20) ABCD is a parallelogram.



Find an expression, in terms of y , for the angle DBC.