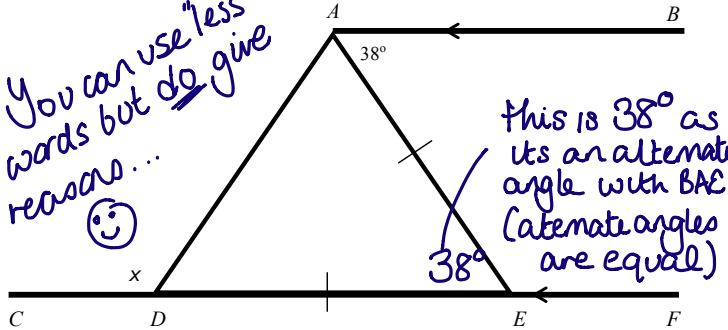


# Angle Facts – parallel lines

How to

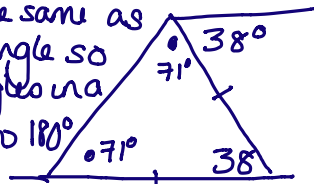
You can use "less" words but do give reasons... 😊



$CDEF$  is a straight line.  $AB$  is parallel to  $CF$ .  
 $DE = AE$

Work out the size of the angle marked  $x$ . You must give reasons for your answer.

These 2 angles are the same as its an isosceles triangle so given that the angles in a triangle add up to  $180^\circ$



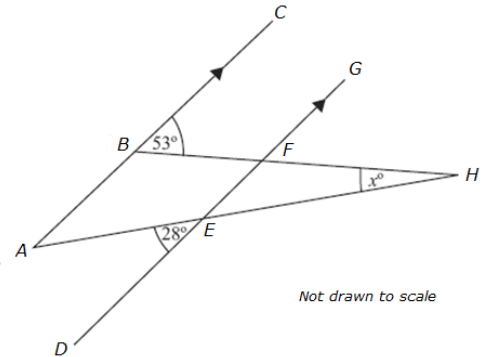
$$180 - 38 = 142$$

$$142 \div 2 = 71^\circ$$

Angles on a straight line at a point =  $180$  so  $180 - 71 = 109$   
 $\therefore x = 109^\circ$  (4)

Now have a go yourself ...

Q1.  $ABC$  and  $DEFG$  are parallel.  $AEH$  and  $BFH$  are straight lines. Work out the size of the angle marked  $x$ , giving reasons for your answers.

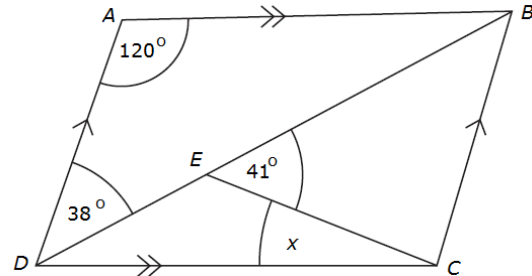


Not drawn to scale

Q2.  $ABCD$  is a parallelogram.

Angle  $ADB = 38^\circ$   
 Angle  $BEC = 41^\circ$   
 Angle  $DAB = 120^\circ$

Calculate the size of the angle  $x$ . You must give reasons for your answer.

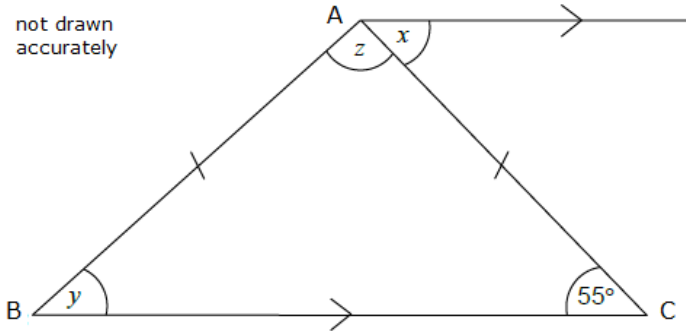


## Exam Question

ABC is an isosceles triangle with  $AB = AC$

BC is parallel to AD and angle  $BCA = 55^\circ$

not drawn  
accurately



Work out the sizes of the angles marked  $x$ ,  $y$  and  $z$  giving reasons for your answers.

(4)

## Ready to be marked ?

### Checklist



Answer checked

Reasons given

### Keywords



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### Things to remember ...



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### What went well ...



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### Teacher comment ..