

Using the properties of angles



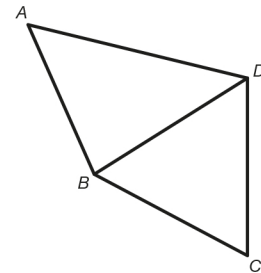
SNAPIT! Properties of angles

Angles on a straight line always add up to 180° .

Angles in a triangle always add up to 180° .

Quadrilaterals can always be divided into two triangles.

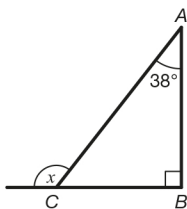
Therefore, angles in a quadrilateral always add up to $2 \times 180^\circ = 360^\circ$



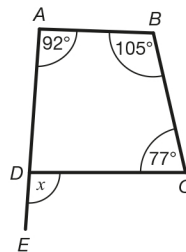
① Work out the size of the angles marked x in the diagrams.

You must show your working. (★)

a (2 marks)



b (2 marks)



State the size of an angle and then give a reason.
For example, angle $a = 46^\circ$
(Angles on a straight line add up to 180°)

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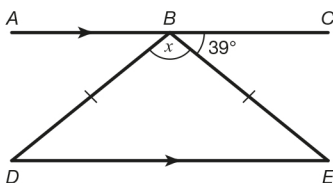
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[Total: 4 marks]

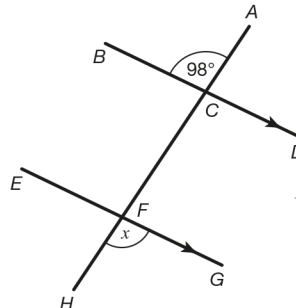
② Work out the size of the angles marked x in the diagrams.

You must show your working. (★★★)

a (2 marks)



b (2 marks)



Look for equal angles.
For example, base angles of an isosceles triangle are equal; corresponding angles are equal; vertically opposite angles are equal; alternate angles are equal.

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[Total: 4 marks]