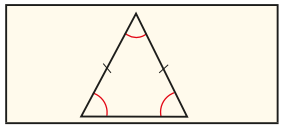
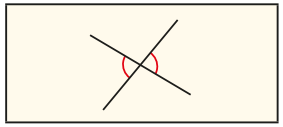
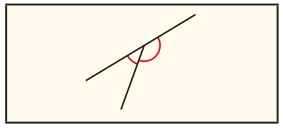
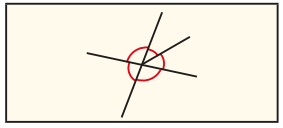
Angles in a triangle – missing angles

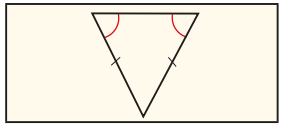
1 Match each diagram to the correct rule.











Angles on a straight line sum to 180°

Angles around a point sum to 360°

Angles in a triangle sum to 180°

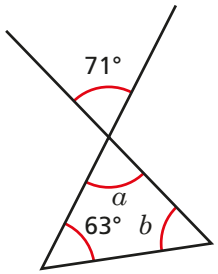
In an isosceles triangle, two angles are equal

Vertically opposite angles are equal

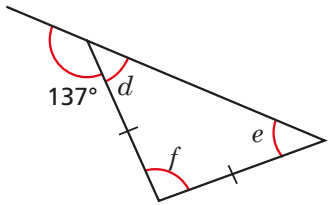
2 Work out the sizes of the unknown angles.

Give reasons for each stage of your working.

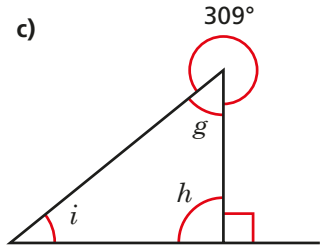
a)



b)

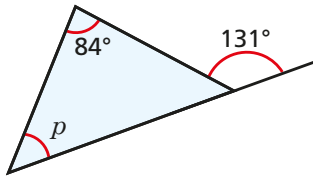


c)

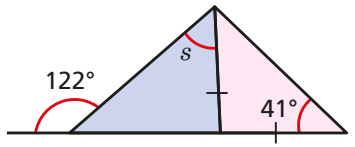


3 Work out the sizes of the angles marked with letters.

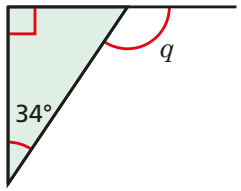
a)



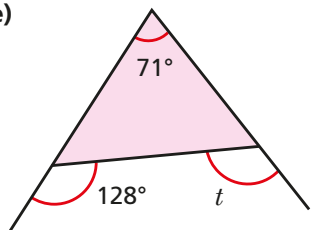
d)



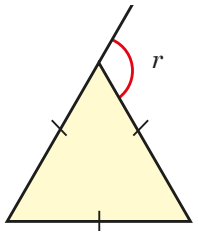
b)



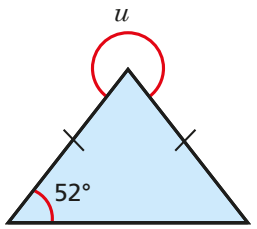
e)



c)



f)

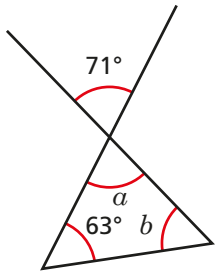


Angles in a triangle – missing angles

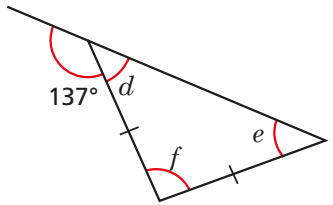
2 Work out the sizes of the unknown angles.

Give reasons for each stage of your working.

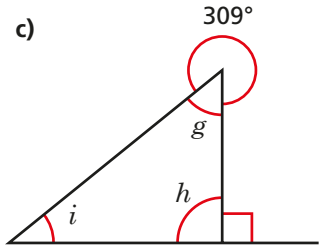
a)



b)

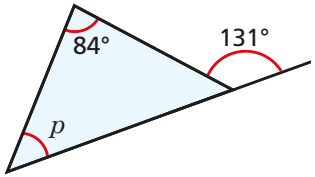


c)

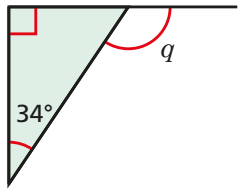


3 Work out the sizes of the angles marked with letters.

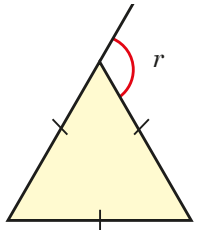
a)



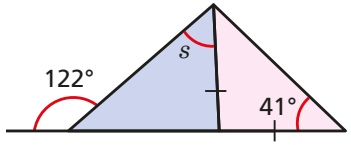
b)



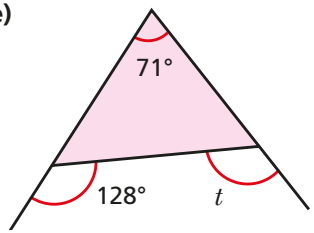
c)



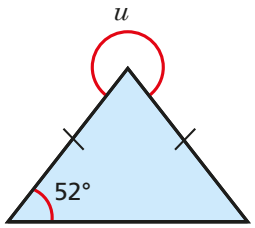
d)



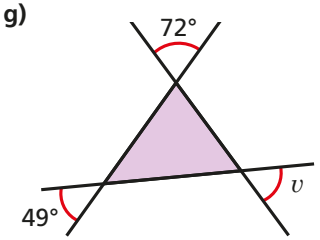
e)



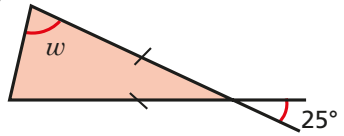
f)



g)



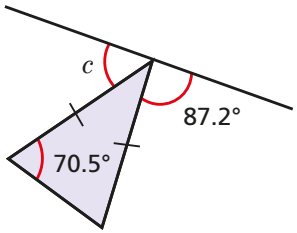
h)



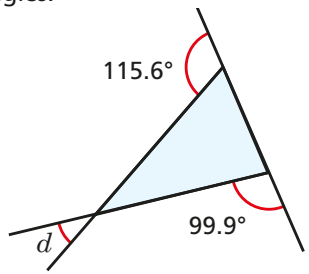
Talk about your reasons with a partner.

4 Work out the sizes of the unknown angles.

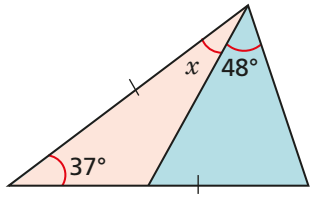
a)



b)



5 Work out the size of angle x.



6 Here is an isosceles triangle.

Find two possible sizes of angle y.