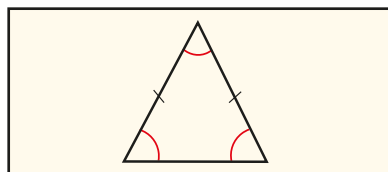
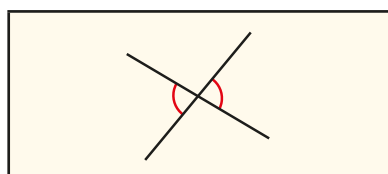


Angles in a triangle – missing angles

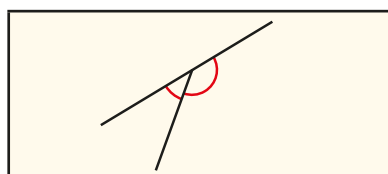
1 Match each diagram to the correct rule.



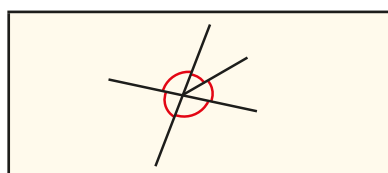
Angles on a straight line sum to 180°



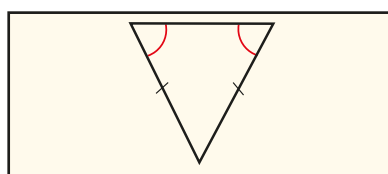
Angles around a point sum to 360°



Angles in a triangle sum to 180°



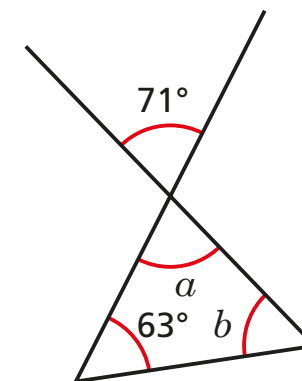
In an isosceles triangle, two angles are equal



Vertically opposite angles are equal

2 Work out the sizes of the unknown angles.
Give reasons for each stage of your working.

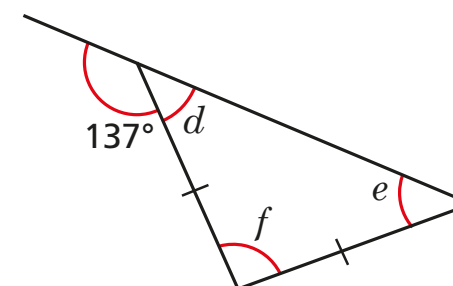
a)



$a =$ because _____

$b =$ because _____

b)

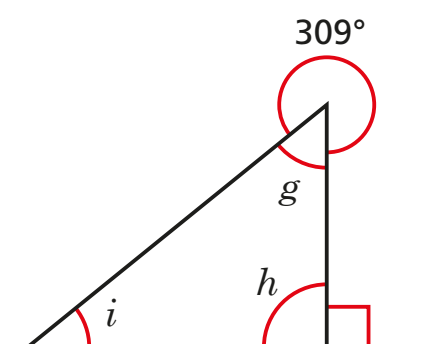


$d =$ because _____

$e =$ because _____

$f =$ because _____

c)

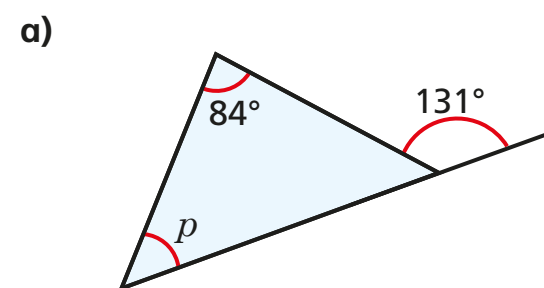


$g =$ because _____

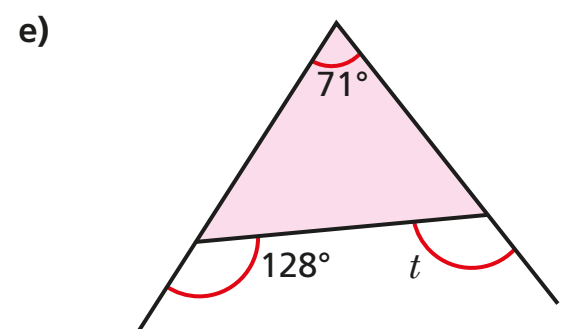
$h =$ because _____

$i =$ because _____

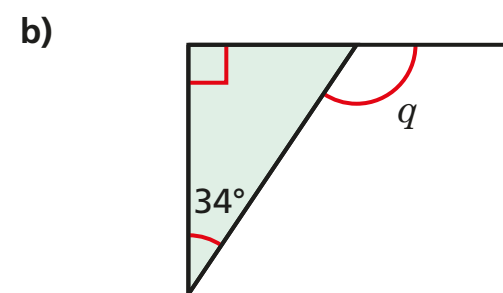
3 Work out the sizes of the angles marked with letters.



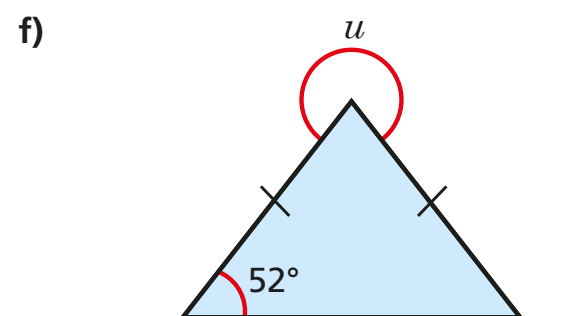
$p =$



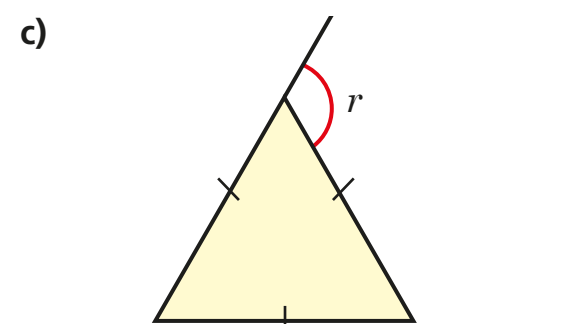
$t =$



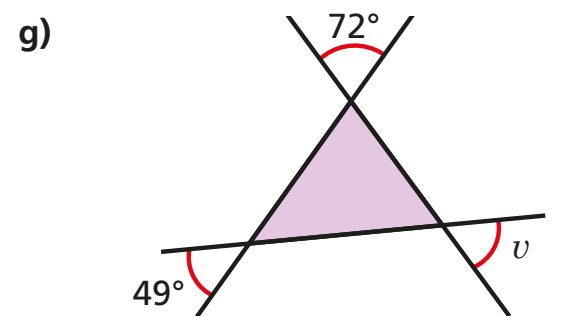
$q =$



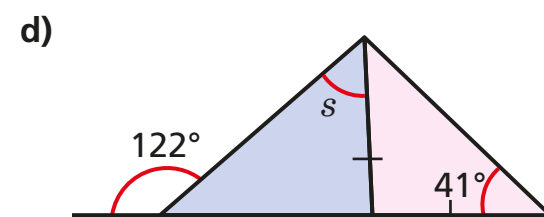
$u =$



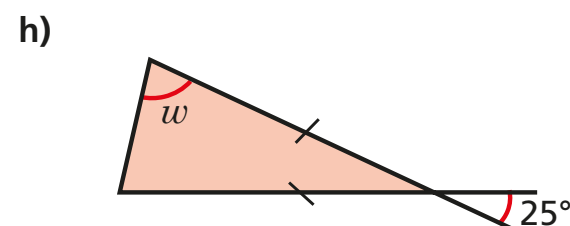
$r =$



$v =$



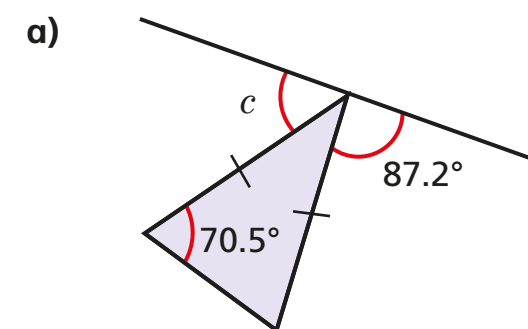
$s =$



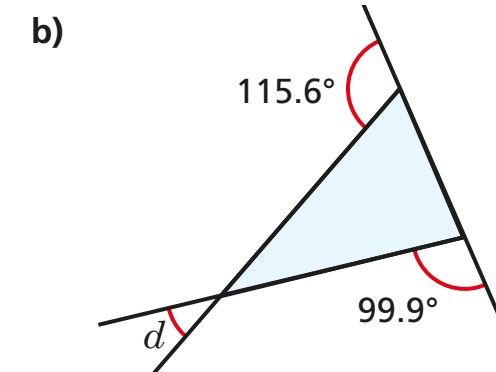
$w =$

Talk about your reasons with a partner.

4 Work out the sizes of the unknown angles.

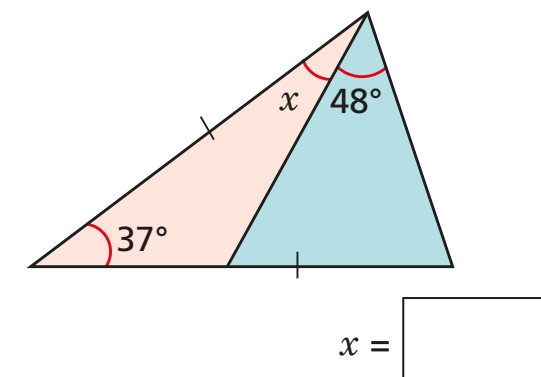


$c =$



$d =$

5 Work out the size of angle x .



6 Here is an isosceles triangle.
Find two possible sizes of angle y .

