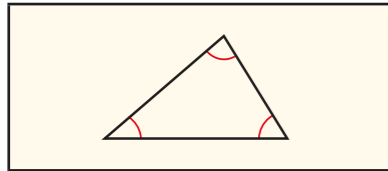
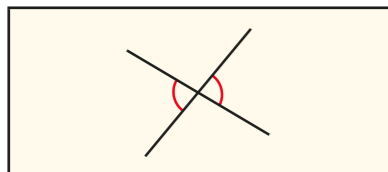


Angles in a triangle – missing angles

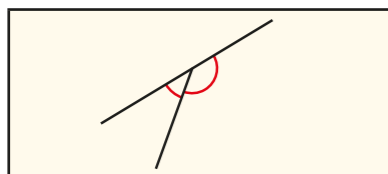
1 Match each diagram to the correct rule.



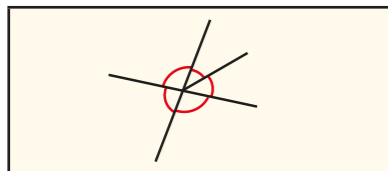
Angles on a straight line sum to 180° .



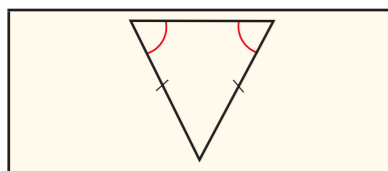
Angles around a point sum to 360° .



Angles in a triangle sum to 180° .

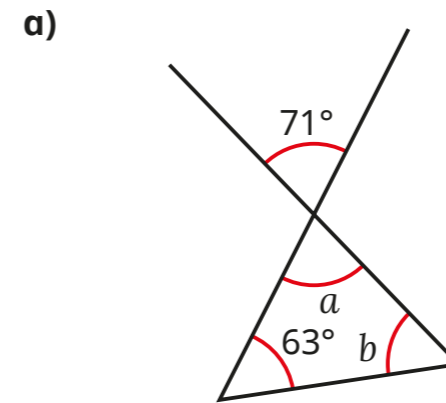


In an isosceles triangle, two angles are equal.



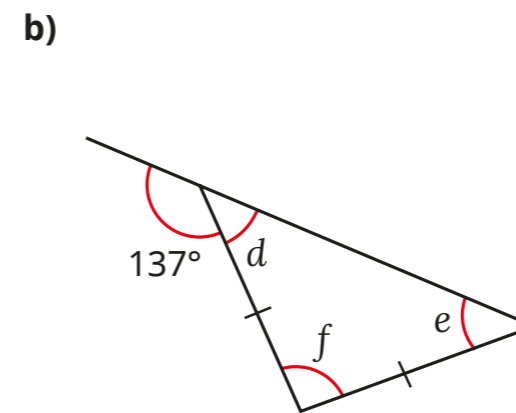
Vertically opposite angles are equal.

2 Work out the sizes of the angles marked with letters. Give reasons for each stage of your workings.



$a = \square^\circ$ because _____

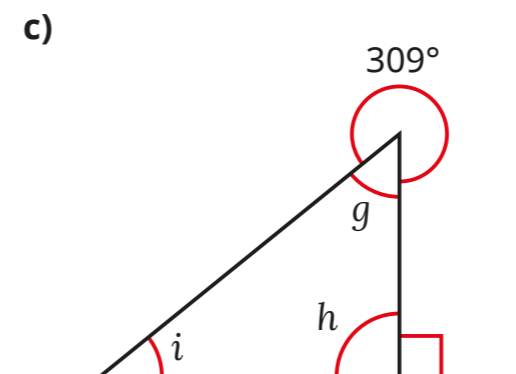
$b = \square^\circ$ because _____



$d = \square^\circ$ because _____

$e = \square^\circ$ because _____

$f = \square^\circ$ because _____

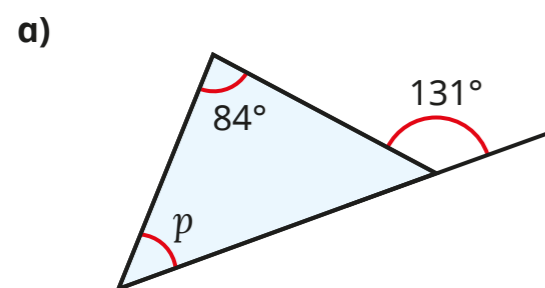


$g = \square^\circ$ because _____

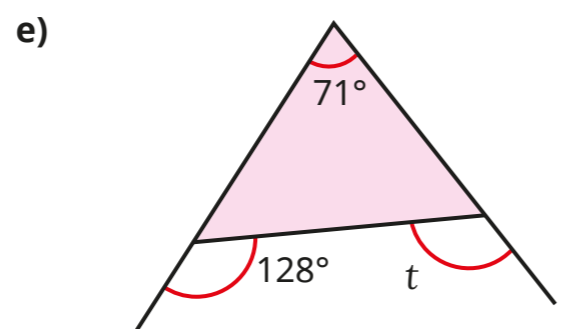
$h = \square^\circ$ because _____

$i = \square^\circ$ because _____

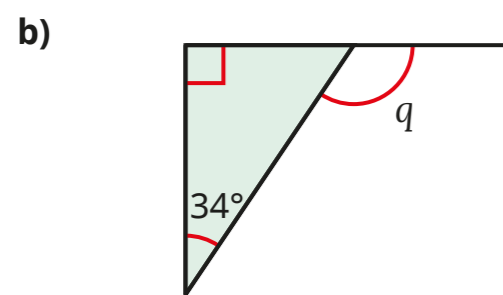
3 Work out the sizes of the angles marked with letters.



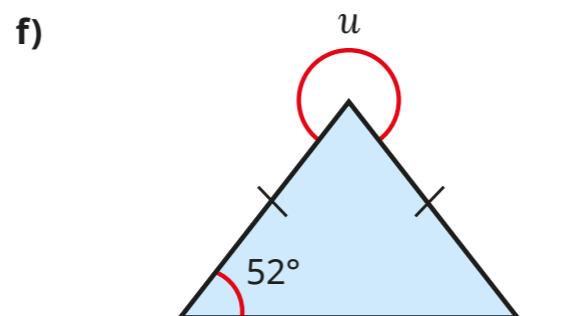
$p = \boxed{}^\circ$



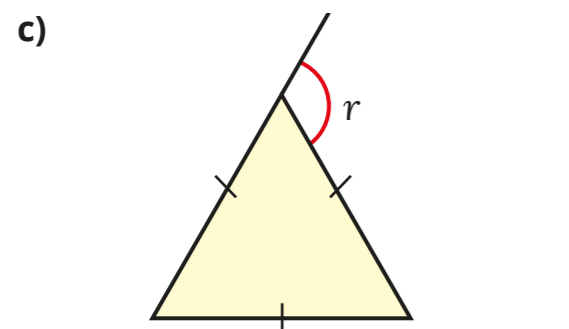
$t = \boxed{}^\circ$



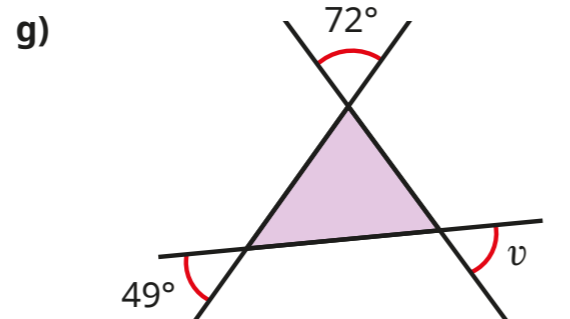
$q = \boxed{}^\circ$



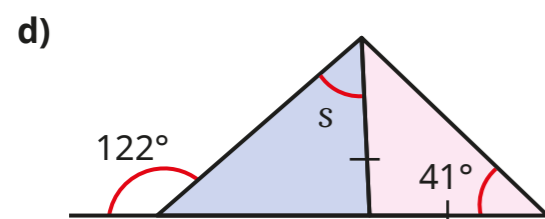
$u = \boxed{}^\circ$



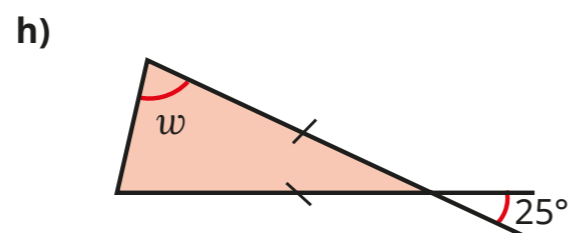
$r = \boxed{}^\circ$



$v = \boxed{}^\circ$



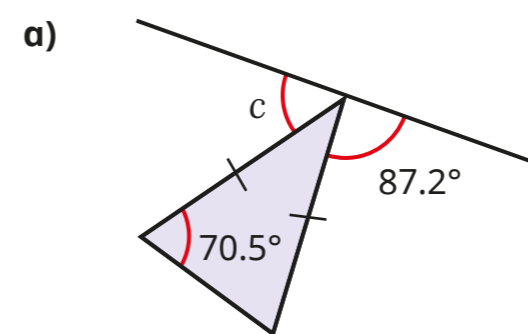
$s = \boxed{}^\circ$



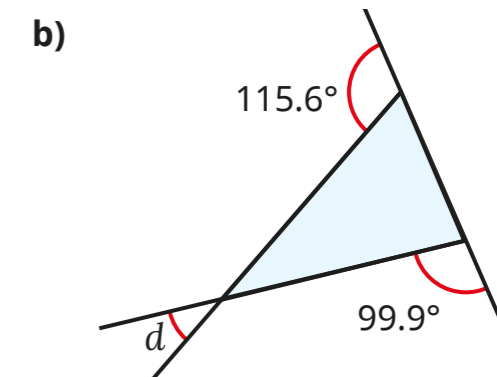
$w = \boxed{}^\circ$

Talk about your reasons with a partner.

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

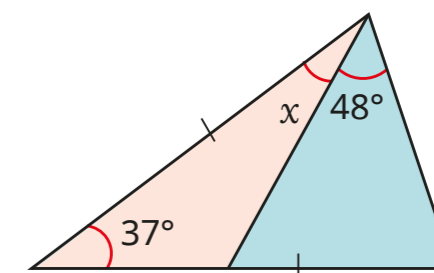


$c = \boxed{}^\circ$



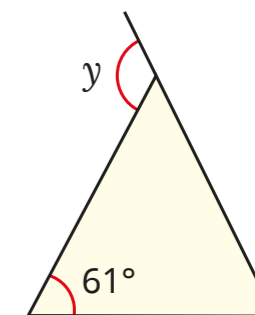
$d = \boxed{}^\circ$

5 Work out the size of angle x.



$x = \boxed{}^\circ$

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



$y = \boxed{}^\circ$ or $\boxed{}^\circ$

Compare answers with a partner.