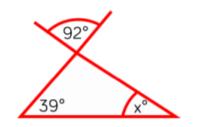
LO: angles in a triangle have a total of 180°

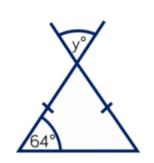
Use your knowledge of angles in a triangle, angles on a straight line and angles around a point to calcuate angle x.

A1 Work out the value of <i>x</i> .	A2 Work out the value of x .	A3 Work out the value of x .	A4 Work out the value of x .
87° 63° x°	x° 52° 27°	x° 66°	x° 36°
B1 Work out the value of x .	B2 Work out the value of x .	B3 Work out the value of x .	B4 Work out the value of x .
x° 123°	78° 42° **	119° x° 137°	121° 86° x°
C1 Work out the value of x .	C2 Work out the value of x .	C3 Work out the value of x .	C4 Work out the value of <i>x</i> .
x° 67°	112° x°	76° x°	32° x°
D1 Work out the value of x .	D2 Work out the value of x .	D3 Work out the value of x .	D4 Work out the value of x .
117° x°	88° x°	109° x°	112° x°

Challenge 1

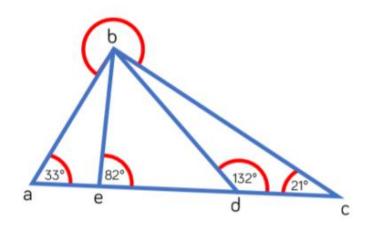
Work out the value of x and y. Explain each step of your working.





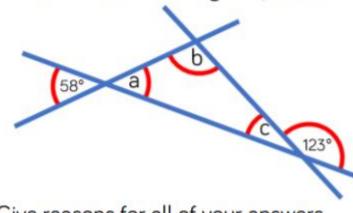
Challenge 2

Calculate the size of the reflex angle b.



Challenge 3

Calculate the size of angles a, b and c.



Give reasons for all of your answers.