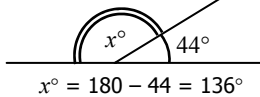
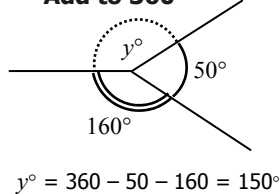


# Calculate Angles on Straight Lines, at Points, in $\Delta$ 's & involving Parallel Lines – iSS1

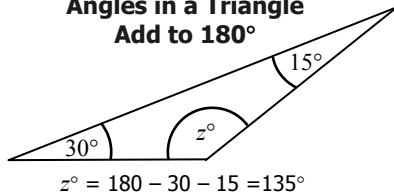
## Angles on a Straight Line Add to $180^\circ$



## Angles at a Point Add to $360^\circ$

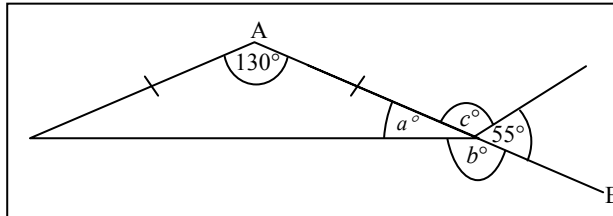
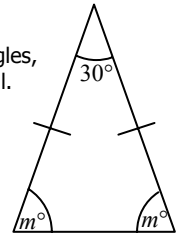


## Angles in a Triangle Add to $180^\circ$



## Isosceles Triangles

In an isosceles  $\Delta$  the two base angles, opposite the equal sides, are equal. These have been labelled  $m^\circ$ . The two angles,  $m^\circ$ , together make  $150^\circ$  ( $180 - 30$ ). So one of them is  $150 \div 2 = 75^\circ$ . So  $m^\circ = 75^\circ$ .

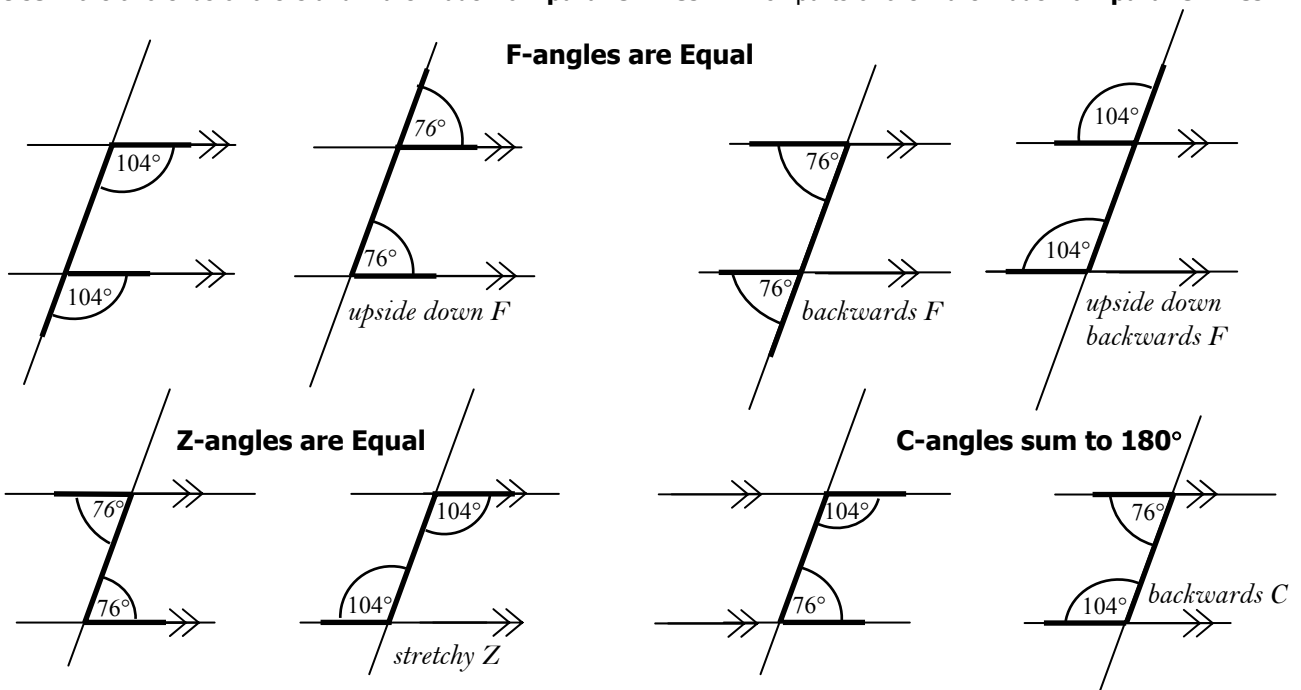


## Your Turn!!

The  $\Delta$  shown is isosceles and AB is a straight line. a) Calculate the missing angles.

## C/F/Z-Angles between Parallel Lines

**Notice...** the two ends of the C and Z are made from **parallel lines**! Which parts of the F are made from **parallel lines**?

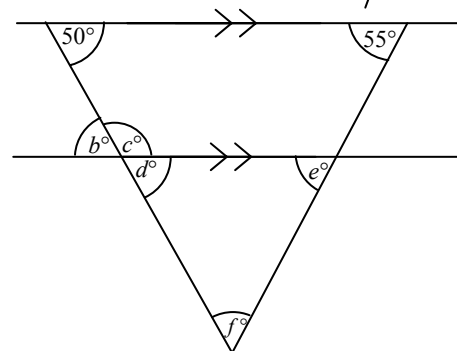


## Your Turn!!

What sort of angle do the following pairs make?

- b)  $b/50^\circ$    c)  $c/50^\circ$    d)  $d/50^\circ$    e)  $e/55^\circ$   
 f) Explain why angles  $c$  and  $e$  are not Z-angles.  
 g) Calculate the angles  $b, c, d, e$  and  $f$ , justifying your results.

**Hint:** To justify use your answers from b-e.



## RAPID 'ACID' TEST

Blank out the page above before answering these!

1. Calculate the angles  $a, b, c, d$  and  $e$ , justifying your results.

