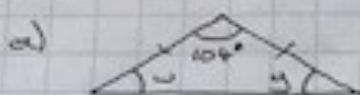


5. First imagine the shape as 2 separate isosceles triangles.

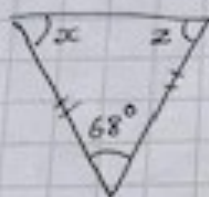


Angles in a triangle =  $180^\circ$

$$104^\circ + w + y = 180^\circ$$

$$w + y = 76^\circ$$

$$w = 38^\circ, y = 38^\circ$$



$$68^\circ + x + z = 180^\circ$$

$$x + z = 112^\circ$$

$$x = 56^\circ, z = 56^\circ$$

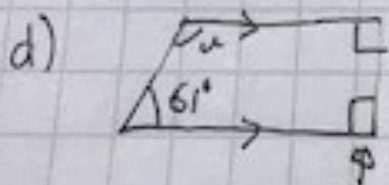
- b)  $w + x = 38^\circ + 56^\circ = 94^\circ$   
c)  $y + z = 38^\circ + 56^\circ = 94^\circ$  } They are the same.

6. a) Angles in a quadrilateral add to  $360^\circ$ .

$$91^\circ + 87^\circ + 113^\circ + r = 360^\circ \quad r = 69^\circ$$

- b) Opposite angles in a parallelogram are equal. So  $s$  also equals  $73^\circ$ .

- c) Opposite angles in a kite are equal. So  $t$  also equals  $107^\circ$ .



$$90^\circ + 90^\circ + 61^\circ + u = 360^\circ$$

$$u = 119^\circ$$

This must also be a right angle as the lines are parallel.