

12 (a) Kat has a method for finding the difference between two square numbers, $a^2 - b^2$. Her method is

(the sum of a and b) \times (the difference between a and b).

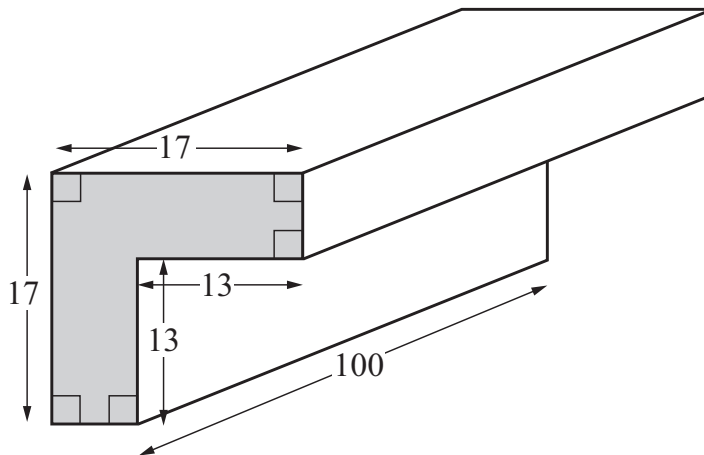
She shows her method for $17^2 - 13^2$.

$17^2 - 13^2$ $= (17 + 13) \times (17 - 13)$ $= 30 \times 4$ $= 120$

Work out $29^2 - 21^2$ using Kat's method.

..... [2]

(b) In this part, all lengths are in centimetres.



NOT TO SCALE

The diagram shows a prism.

Work out the volume of the prism.

..... cm^3 [2]