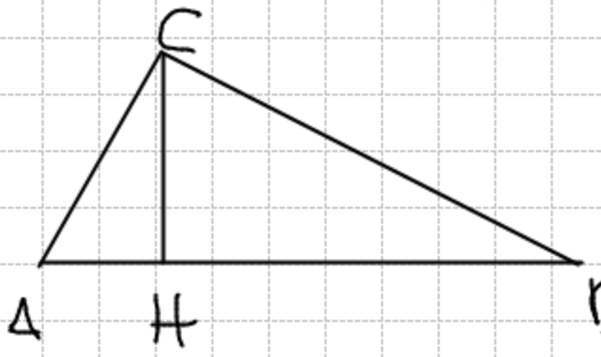
M. 114 pag 225 APPLICARE il 2° Teor di Euclide



$\overline{AH} = 9\ cm$

$\overline{HB} = 16\ cm$

$A = ?$

$\overline{CH}^2 = \overline{AH} \cdot \overline{HB}$

$\overline{CH} = \sqrt{9\ cm \cdot 16\ cm} = \sqrt{144\ cm^2} = 12\ cm$

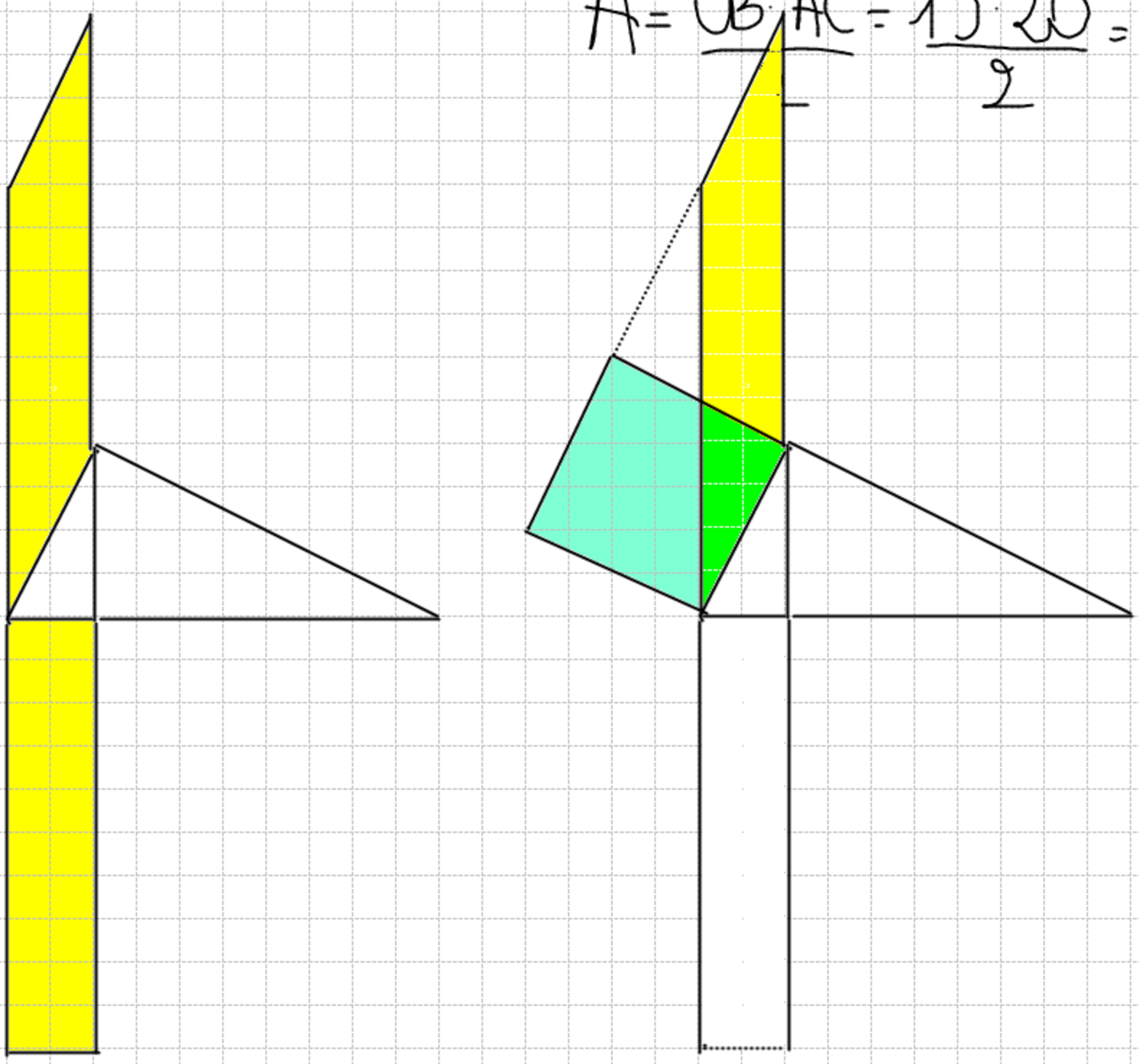
$A = \frac{\overline{AB} \cdot \overline{CH}}{2} = \frac{25\ cm \cdot 12\ cm}{2} = 150\ cm^2$

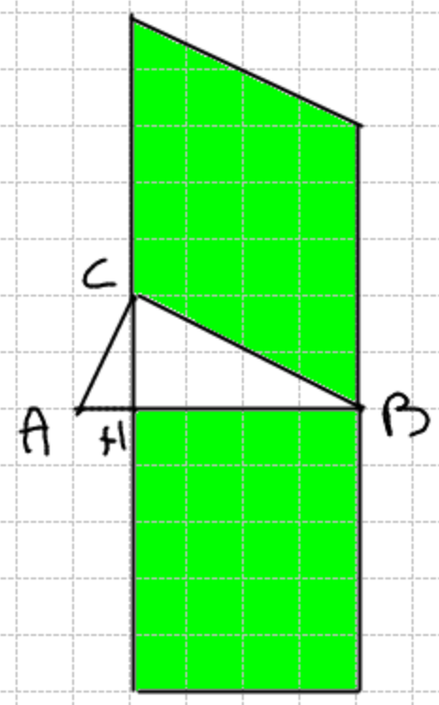
Si può risolvere anche applicando 2 volte il 1° teorema

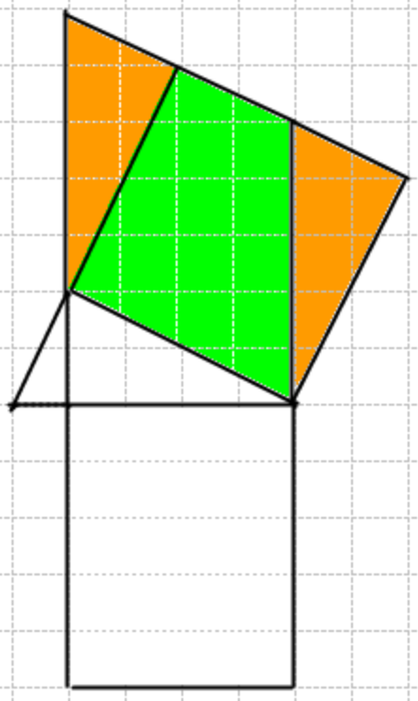
$\overline{AC}^2 = \overline{AB} \cdot \overline{HA} = 25 \cdot 9 \Rightarrow \overline{AC} = \sqrt{25 \cdot 9} = 15\ cm$

$\overline{CB}^2 = \overline{AB} \cdot \overline{BH} = 25 \cdot 16 \Rightarrow \overline{CB} = \sqrt{25 \cdot 16} = 20\ cm$

$A = \frac{CB \cdot AC}{2} = \frac{15 \cdot 20}{2} = 150\ cm^2$







Dimostraz. 1° teor. di Euclide

$\overline{AC}^2 = \overline{AB} \cdot \overline{AH}$

$\overline{BC}^2 = \overline{HB} \cdot \overline{AB}$