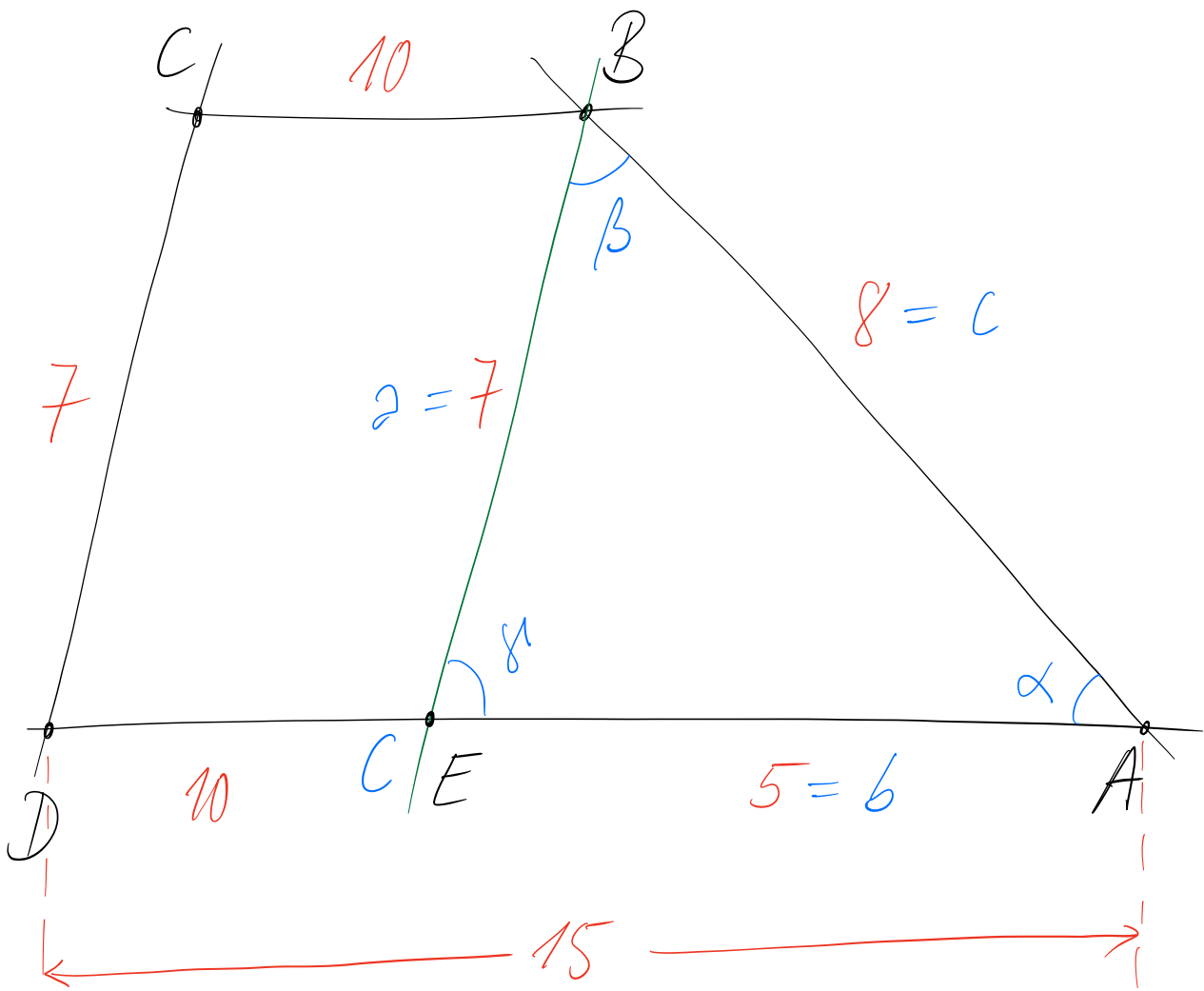


Schéma:



Angles :

$$a^2 = b^2 + c^2 - 2bc \cos \alpha$$

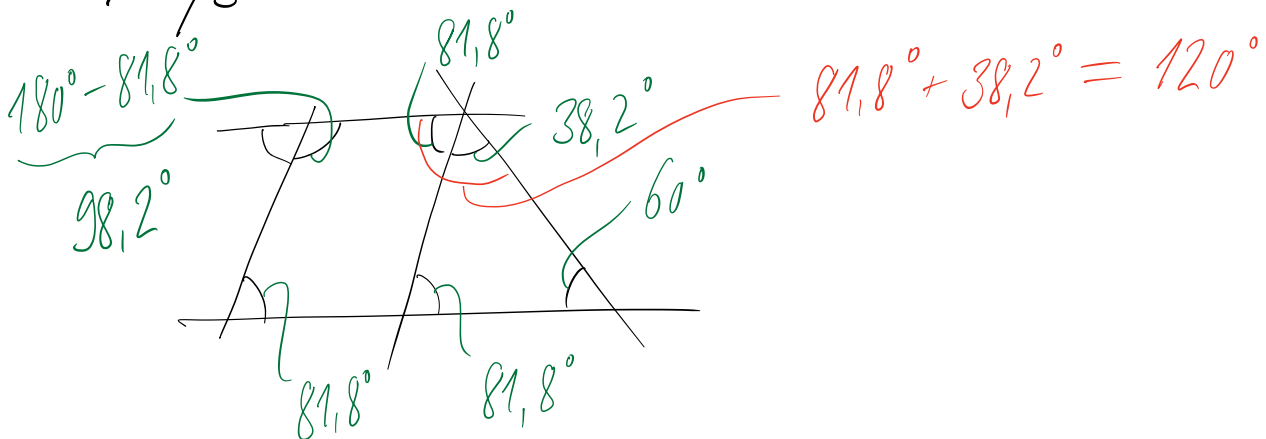
$$7^2 = 5^2 + 8^2 - 2 \cdot 5 \cdot 8 \cdot \cos \alpha$$

$$\Rightarrow \cos \alpha = \frac{7^2 - 8^2 - 5^2}{-80} = 0,5 \Rightarrow \alpha = 60^\circ$$

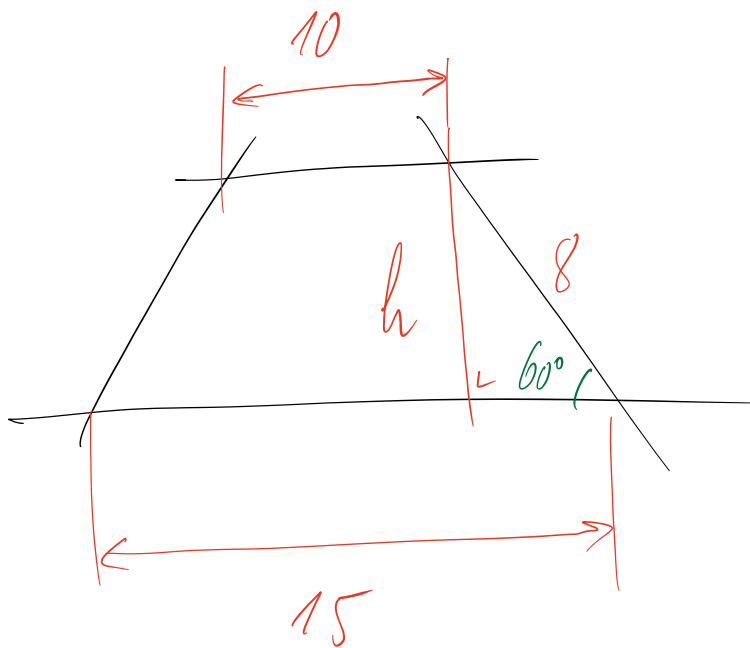
D'autre part: $\frac{8}{\sin \gamma} = \frac{7}{\sin 60^\circ} = \frac{5}{\sin \beta}$

$$\Rightarrow \sin \gamma = \frac{8 \cdot \sin 60^\circ}{7} \approx 0,989743 \quad \gamma \approx 81,8^\circ$$

$$\Rightarrow \beta \approx 180^\circ - 60^\circ - 81,8^\circ \approx 38,2^\circ$$



Area du trapèze :



$$\sin 60^\circ = \frac{h}{8}$$

$$h = 8 \cdot \sin 60^\circ \\ \approx 6,93$$

$$\Rightarrow A = \frac{10 + 15}{2} \cdot h \approx 12,5 \cdot 6,93 \\ \approx 86,60$$