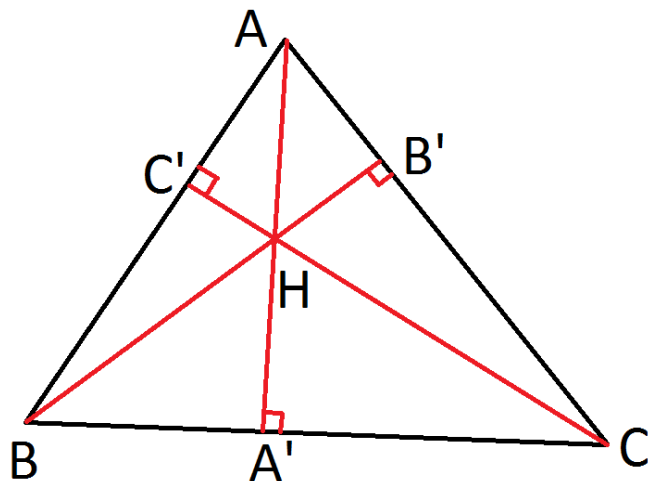


# ARII SI PERIMETRE

## Triunghiul oarecare



$$S_{ABC} = \frac{b \cdot h}{2} = \frac{a \cdot b \sin \hat{C}}{2}$$

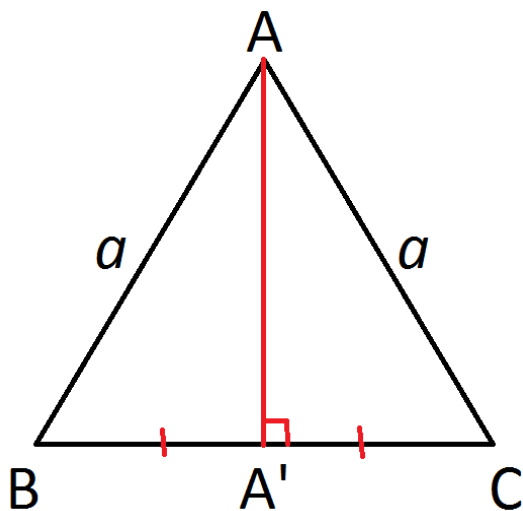
$$S_{ABC} = \frac{AB \cdot CC'}{2} = \frac{BC \cdot AA'}{2} = \frac{AC \cdot BB'}{2}$$

**Proprietăți:**  $AB \cdot CC' = BC \cdot AA' = AC \cdot BB'$

$$S_{ABC} = \sqrt{p(p-a)(p-b)(p-c)}$$

$$p = \frac{a+b+c}{2}, \quad P_{ABC} = a+b+c,$$

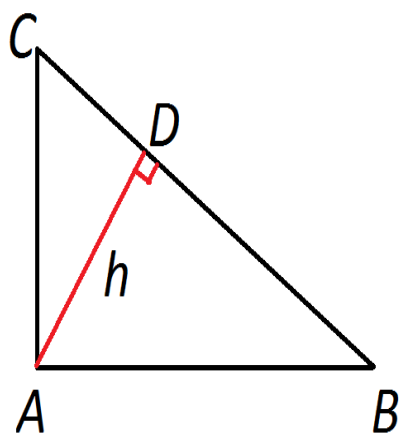
unde  $BC = a, AC = b, AB = c$ .

**Triunghiul echilateral**

$$\mathcal{A}_{ABC} = \frac{a^2 \sqrt{3}}{4},$$

$$\mathcal{P}_{ABC} = 3a,$$

$$h = \frac{a\sqrt{3}}{2}, \quad a_p = \frac{a\sqrt{3}}{6}$$

**Triunghiul dreptunghic**

$$\mathcal{A}_{ABC} = \frac{AB \cdot AC}{2}, \quad \mathcal{A}_{ABC} = \frac{BC \cdot h}{2}$$

$$h = \frac{AB \cdot AC}{BC}$$

$$\mathcal{P}_{ABC} = AB + AC + BC$$