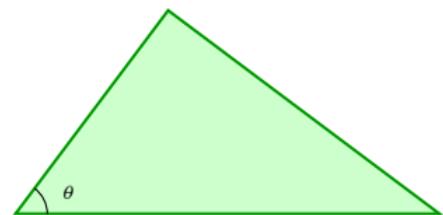
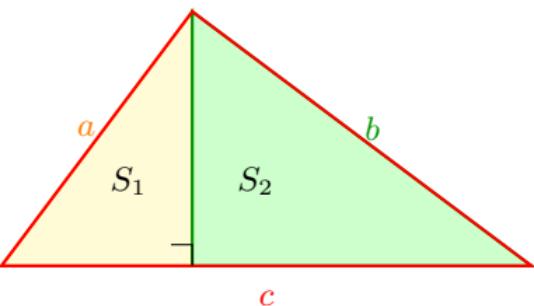


$$S_1 = a^2 \cdot k$$



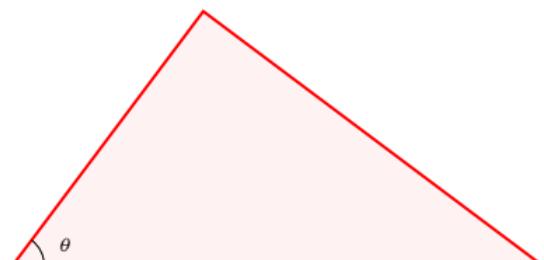
$$S_2 = b^2 \cdot k$$

$$S = S_1 + S_2$$

$$c^2 \cdot k = a^2 \cdot k + b^2 \cdot k$$

$$\Rightarrow \mathbf{c}^2 = \mathbf{a}^2 + \mathbf{b}^2$$

where  $k = \frac{1}{2} \sin \theta \cos \theta$



$$S = c^2 \cdot k$$