

RISOLVERE UN TRIANGOLO RETTANGOLO

L'IPOTENUSA CORRISPONDE SEMPRE CON IL RAGGIO

IPOTENUSA = R

CATETO ADIACENTE = $R \cos \theta$

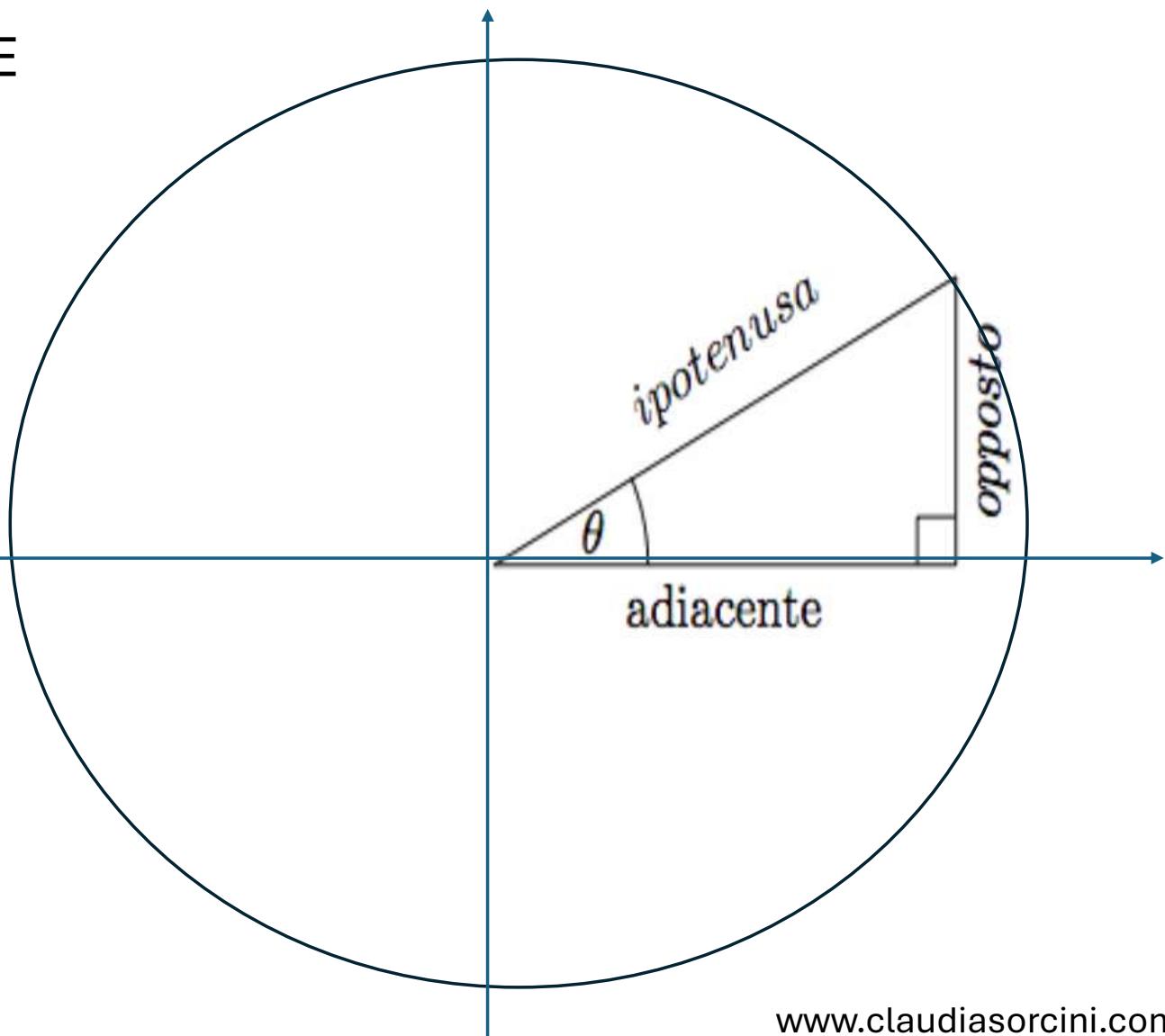
CATETO ADIACENTE = $R \sin \theta$

Rapporti trigonometrici

$$\sin \theta = \frac{\text{opposto}}{\text{ipotenusa}}$$

$$\cos \theta = \frac{\text{adiacente}}{\text{ipotenusa}}$$

$$\tan \theta = \frac{\text{opposto}}{\text{adiacente}}$$



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Teorema di Pitagora

$$a^2 + b^2 = c^2$$

Rapporti trigonometrici

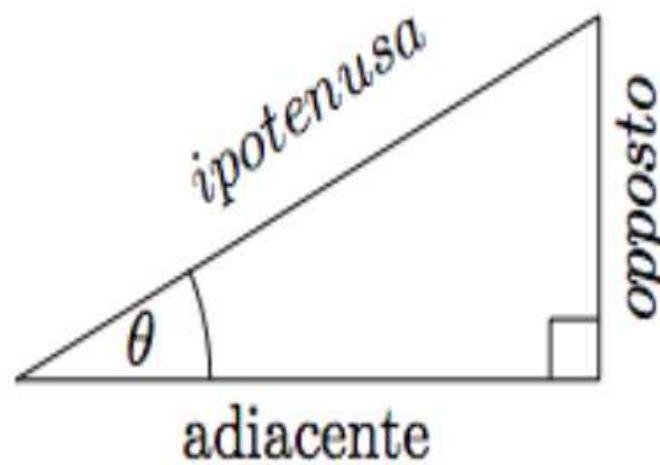
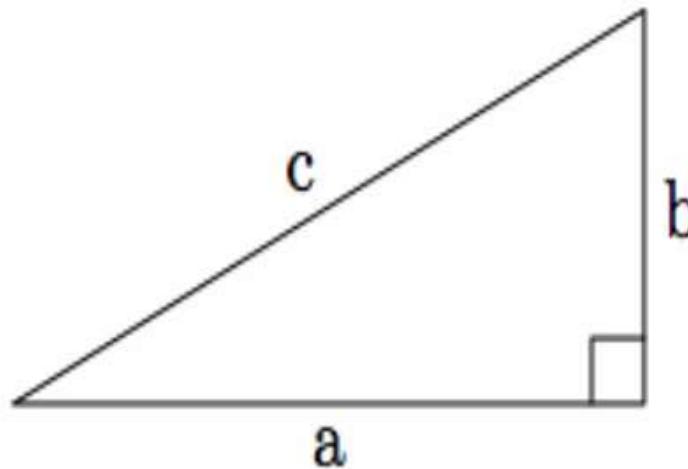
$$\sin \theta = \frac{\text{opposto}}{\text{ipotenusa}}$$

$$\cos \theta = \frac{\text{adiacente}}{\text{ipotenusa}}$$

$$\tan \theta = \frac{\text{opposto}}{\text{adiacente}}$$

Somma degli angoli interni

$$\alpha + \beta + \gamma = 180^\circ$$



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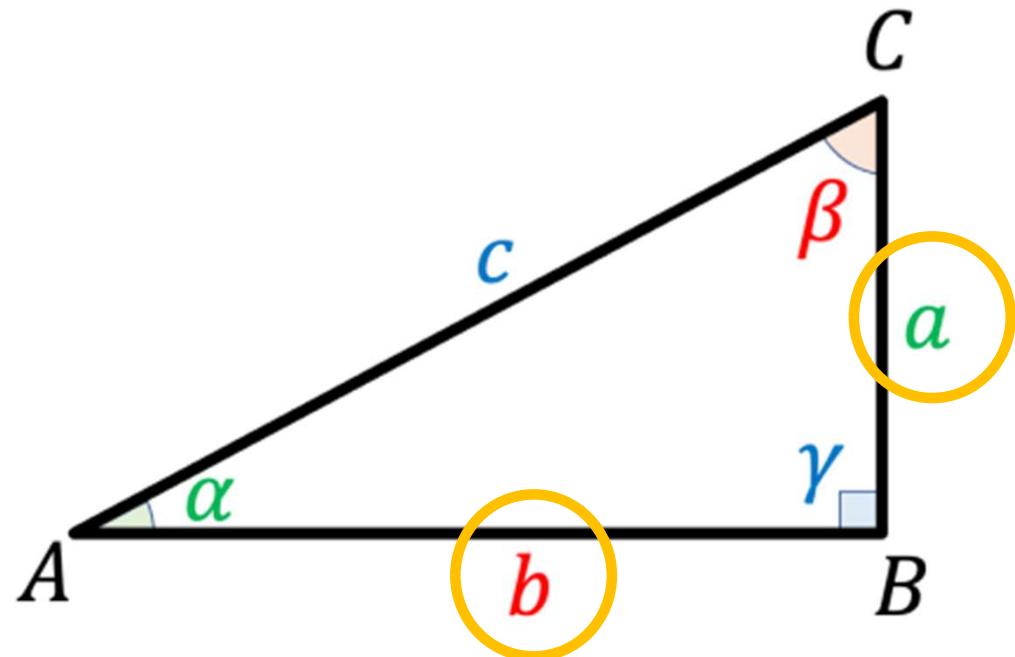
NOTI I DUE CATETI

$$\tan \alpha = \frac{a}{b}$$

$$\beta = 90^\circ - \alpha$$

$$c = \sqrt{a^2 + b^2}$$

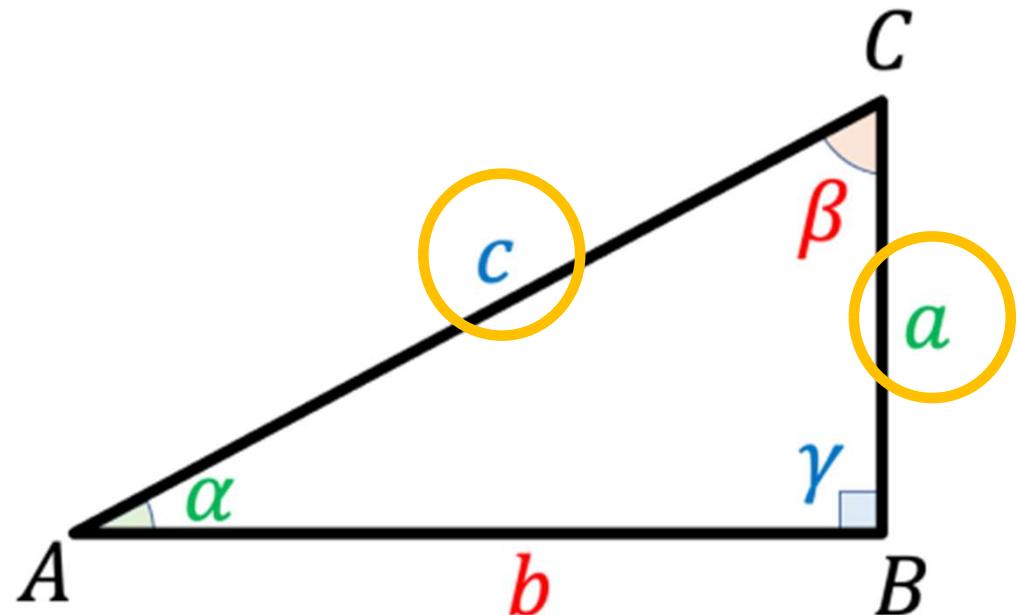
$$\frac{c \sin \alpha}{c \cos \alpha} = \frac{CB}{AB}$$



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NOTI UN CATETO E L'IPOTENUSA

$$\sin \alpha = \frac{a}{c}$$
$$\beta = 90^\circ - \alpha$$
$$b = \sqrt{c^2 - a^2}$$



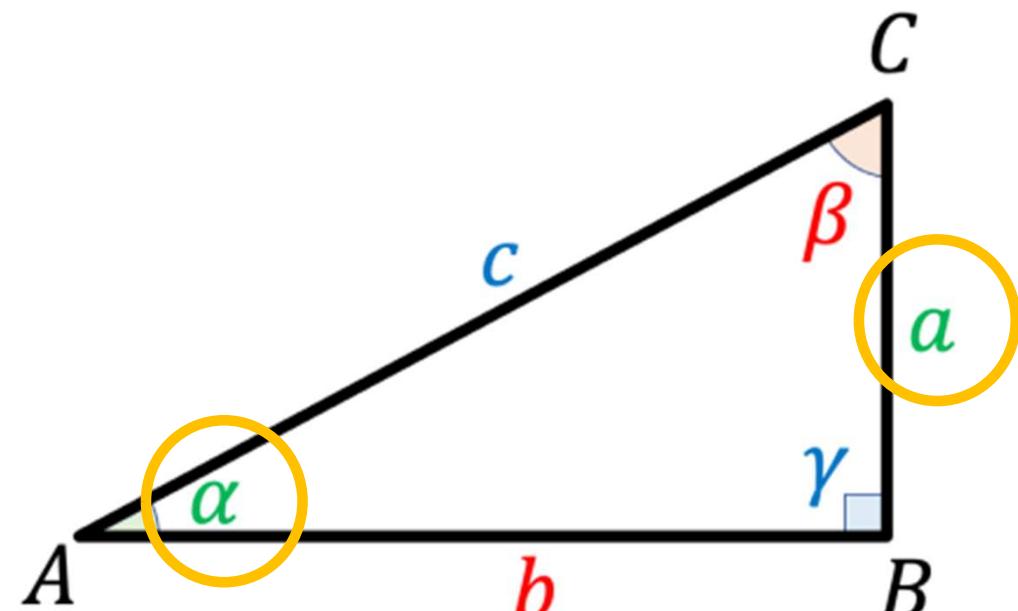
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NOTI UN CATETO E L'ANGOLO ACUTO

$$\beta = 90^\circ - \alpha$$

$$b = a \cdot \tan \beta$$

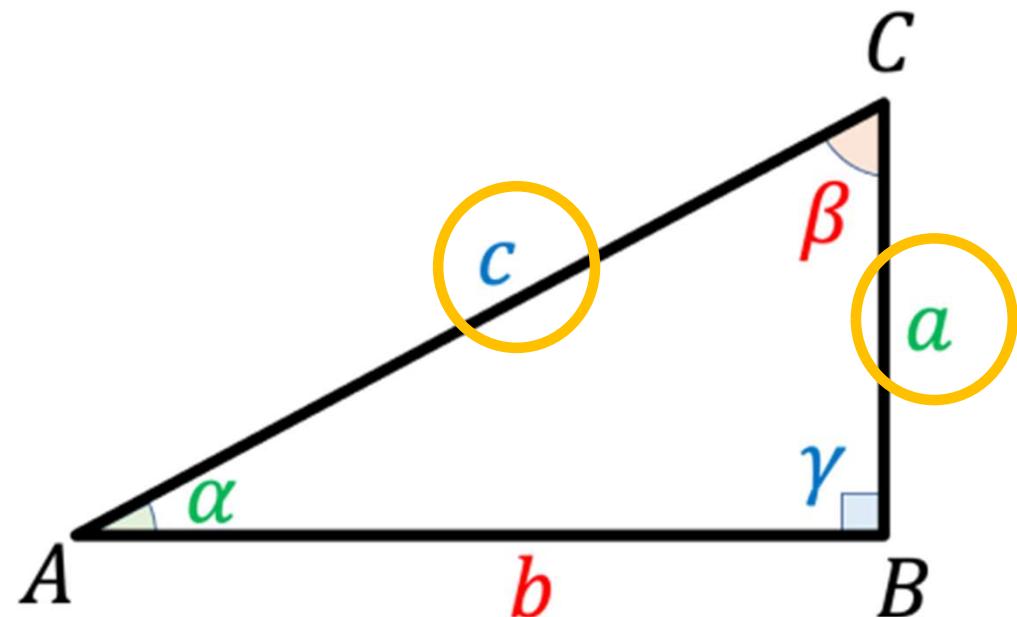
$$c = \sqrt{a^2 + b^2}$$



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NOTI UN CATETO E L'IPOTENUSA

$$\sin \alpha = \frac{a}{c}$$
$$\beta = 90^\circ - \alpha$$
$$b = \sqrt{c^2 - a^2}$$



FORMULE PER RISOLVERE UN TRIANGOLO QUALESIASI

Regola dei seni
(per trovare i lati)

$$\frac{a}{\sin \alpha} = \frac{b}{\sin \beta} = \frac{c}{\sin \gamma}$$

Regola dei coseni
(per trovare i lati)

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

$$\alpha + \beta + \gamma = 180^\circ$$

Regola dei seni
(per trovare gli angoli)

$$\frac{\sin \alpha}{a} = \frac{\sin \beta}{b} = \frac{\sin \gamma}{c}$$

Regola dei coseni
(per trovare gli angoli)

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

