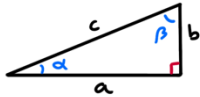


Funzioni Trigonometriche

Definizione

Dato un triangolo rettangolo come in figura, allora:



- $\sin(\alpha) = \frac{b}{c}$

- $\cos(\alpha) = \frac{a}{c}$

- $\tan(\alpha) = \frac{\sin(\alpha)}{\cos(\alpha)} = \frac{b}{a}$

$$\sin(\beta) = \frac{a}{c}$$

$$\cos(\beta) = \frac{b}{c}$$

$$\tan(\beta) = \frac{\sin(\beta)}{\cos(\beta)} = \frac{a}{b}$$

Proprietà

- $-1 \leq \sin(x) \leq 1$ $-1 \leq \cos(x) \leq 1$

- $\sin(90^\circ - x) = \cos(x)$

- $\cos(90^\circ - x) = \sin(x)$

- $\sin^2(x) + \cos^2(x) = 1$