

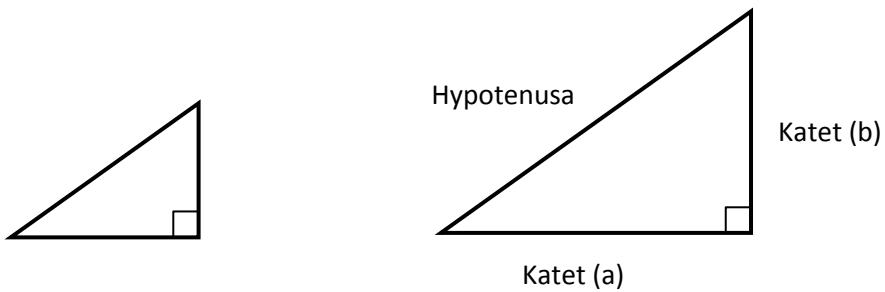
# Trigonometri 1

## Teori

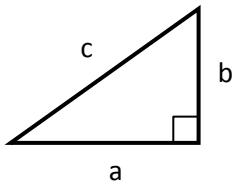
### Rätvinklig triangel

Summan av alla vinklar är  $180^\circ$

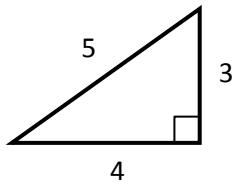
En vinkel är  $90^\circ$



### Pythagoras sats



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



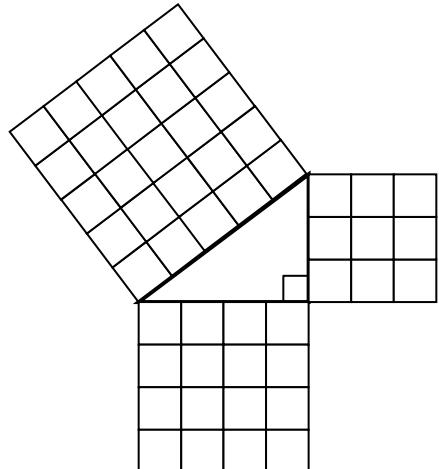
$$a^2 = c^2 - b^2$$

$$b^2 = c^2 - a^2$$

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

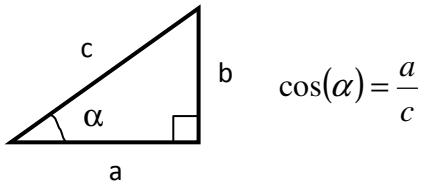
$$a = \sqrt{c^2 - b^2}$$

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

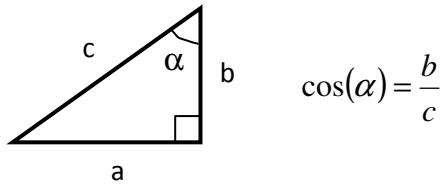


## Cosinus [cos]

Cosinus = närliggande katet / hypotenusan



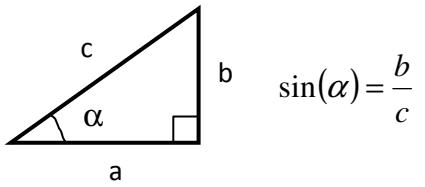
$$\cos(\alpha) = \frac{a}{c}$$



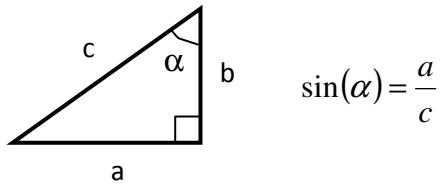
$$\cos(\alpha) = \frac{b}{c}$$

## Sinus [sin]

Sinus = motstående katet / hypotenusan



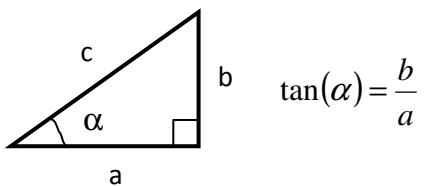
$$\sin(\alpha) = \frac{b}{c}$$



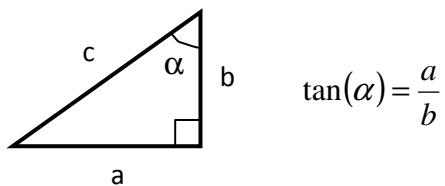
$$\sin(\alpha) = \frac{a}{c}$$

## Tangens [tan]

Tangens = motstående katet / närliggande katet



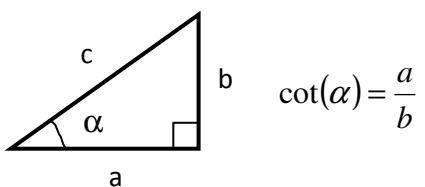
$$\tan(\alpha) = \frac{b}{a}$$



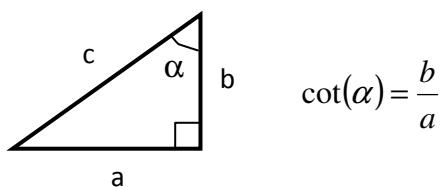
$$\tan(\alpha) = \frac{a}{b}$$

## Cotangens [cot]

Cotangens = närliggande katet / motstående katet



$$\cot(\alpha) = \frac{a}{b}$$



$$\cot(\alpha) = \frac{b}{a}$$