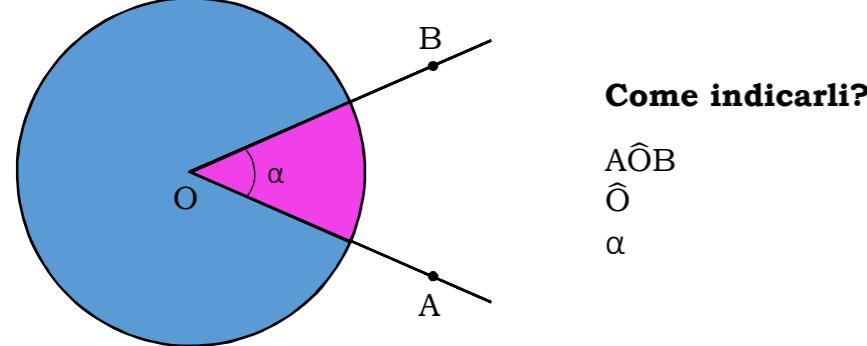


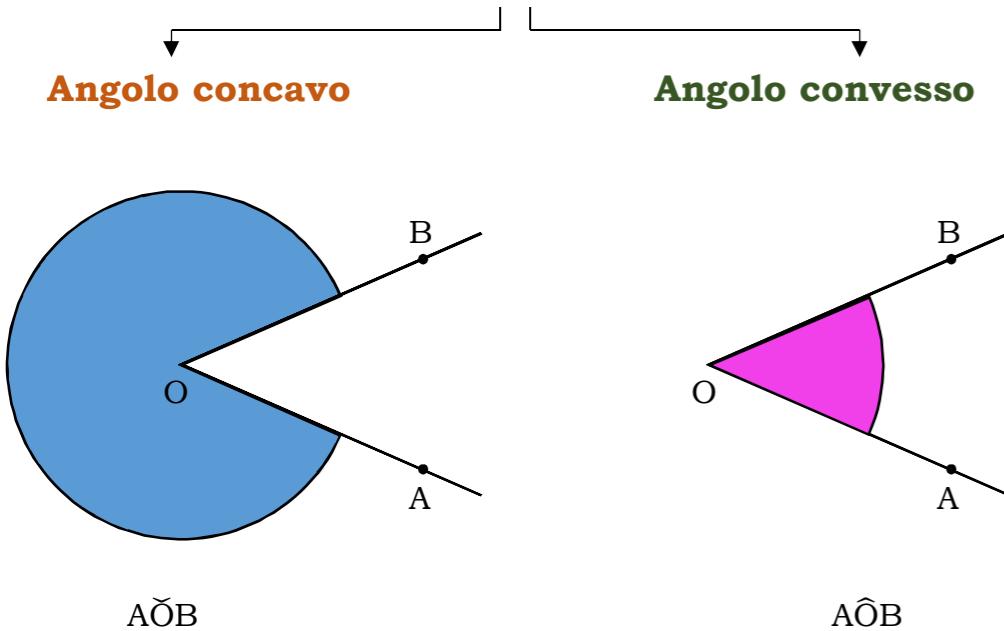
# ANGOLI

## DEFINIZIONE:

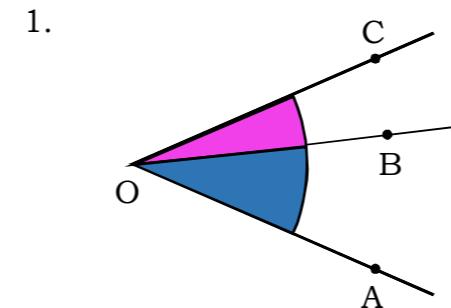
Ciascuna delle parti di piano delimitata da due semirette aventi la stessa origine



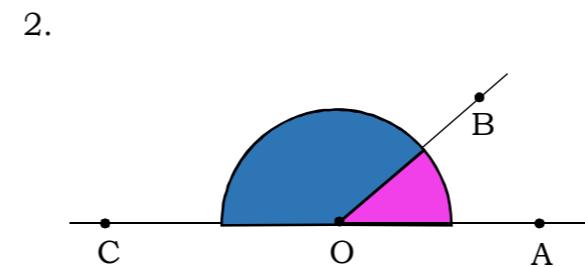
La definizione porta a due diversi tipi di angoli (noi studieremo i convessi!!)



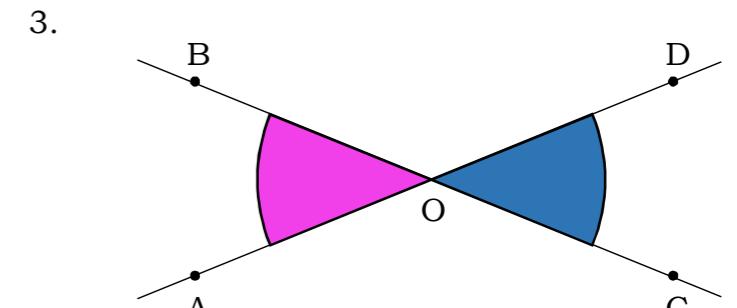
## Relazioni tra angoli



$A\hat{O}B$  e  $C\hat{O}B$  sono detti consecutivi perché hanno una semiretta in comune ed un vertice in comune

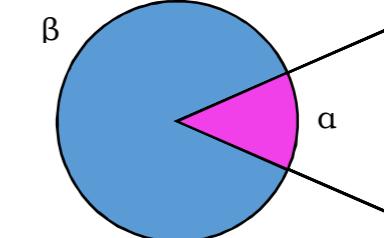
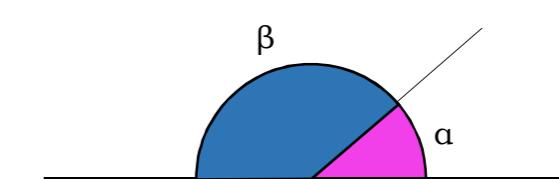
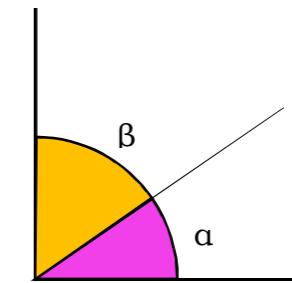


$A\hat{O}B$  e  $C\hat{O}B$  sono detti adiacenti perché hanno una semiretta in comune, un vertice in comune e le altre due semirette appartengono alla stessa retta

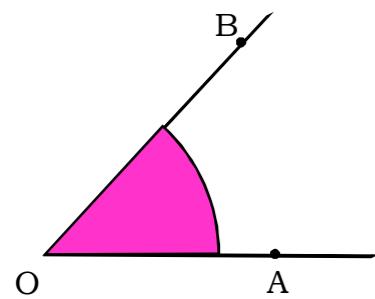


$A\hat{O}B$  e  $C\hat{O}D$  si dicono opposti al vertice. Due angoli opposti al vertice sono sempre uguali!!

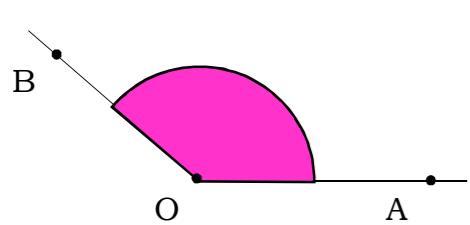
## Angoli complementari supplementari ed esplementari:



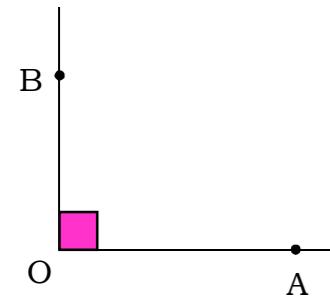
## Angoli particolari



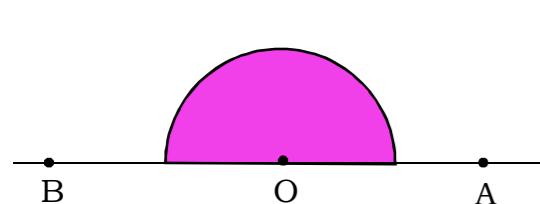
$$\begin{aligned} A\hat{O}B &= \text{acuto} \\ A\hat{O}B &< 90^\circ \end{aligned}$$



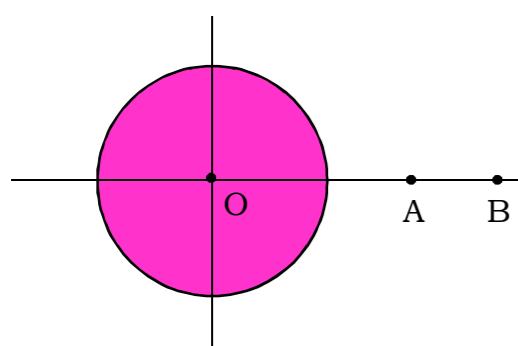
$$\begin{aligned} A\hat{O}B &= \text{ottuso} \\ 90^\circ < A\hat{O}B &< 180^\circ \end{aligned}$$



$$\begin{aligned} A\hat{O}B &= \text{retto} \\ A\hat{O}B &= 90^\circ \end{aligned}$$



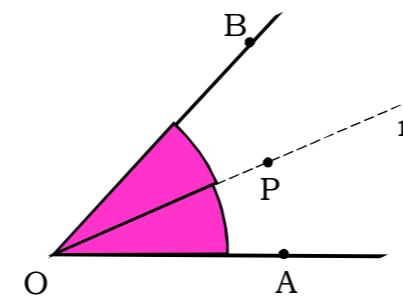
$$\begin{aligned} A\hat{O}B &= \text{piatto} \\ A\hat{O}B &= 180^\circ \end{aligned}$$



$$\begin{aligned} A\hat{O}B &= \text{giro} \\ A\hat{O}B &= 360^\circ \end{aligned}$$

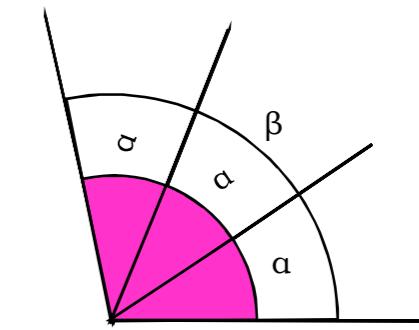
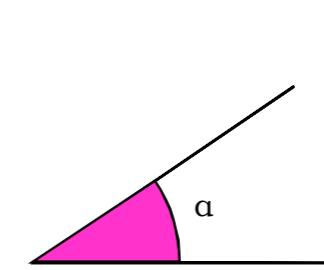
## Bisettrice di un angolo

È la semiretta che parte dal vertice di un angolo e lo divide in parti uguali



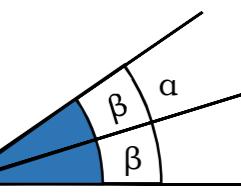
$r$  è la bisettrice perché:  
 $A\hat{O}P = P\hat{O}B$

## Multipli e sottomultipli di un angolo



$$\alpha = \frac{1}{3} \beta$$

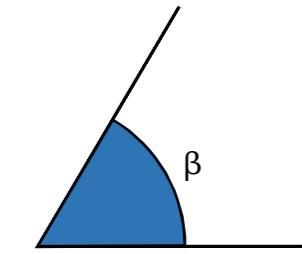
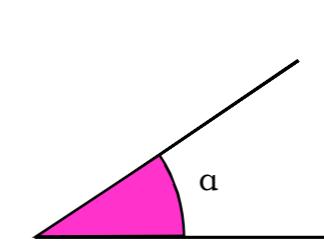
Oppure  
 $\beta = 3\alpha$



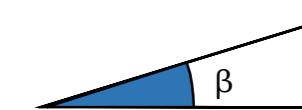
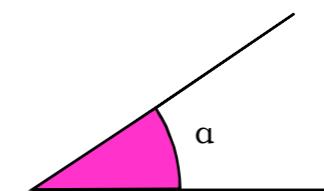
$$\beta = \frac{1}{2} \alpha$$

Oppure  
 $\alpha = 2\beta$

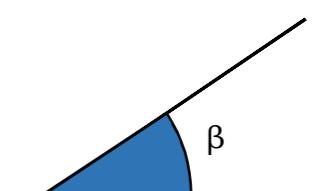
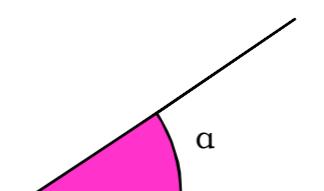
## Saper confrontare gli angoli



$$\alpha < \beta$$



$$\alpha > \beta$$



$$\alpha = \beta$$