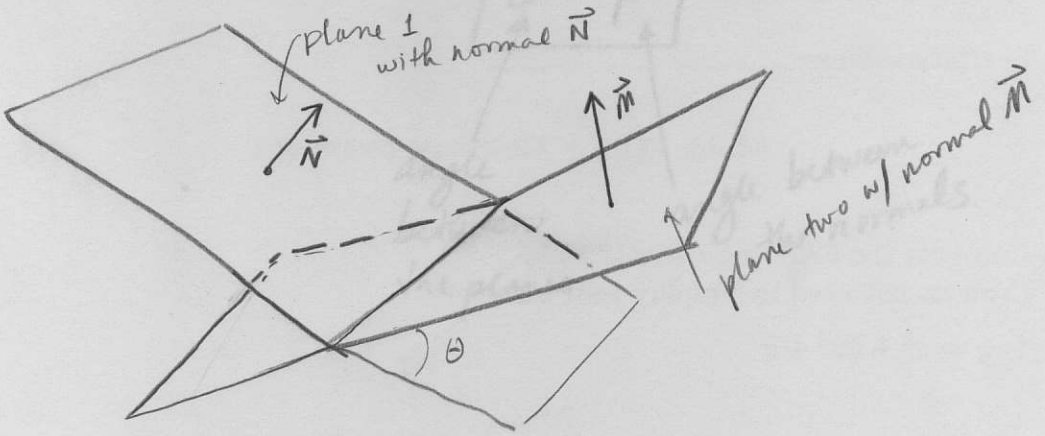
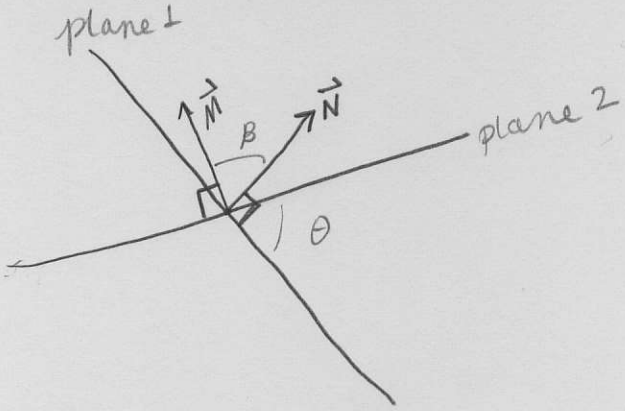
The Angle Between two planes = Angle Between their Normal vectors!

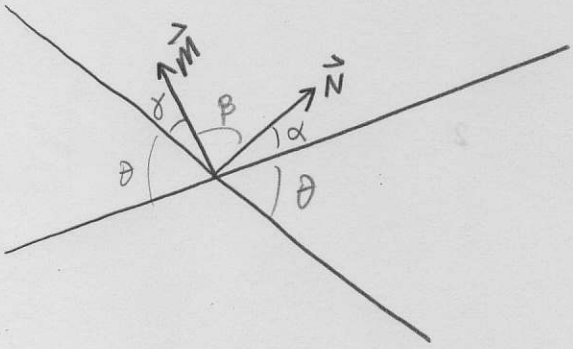
If we have two intersecting planes:



Here the angle between them, θ, is the smallest angle you see when you look at the planes from the side along the line of intersection:



we can show that θ = angle between $\vec{M}$ and $\vec{N}$ = β.



since $\vec{N} \perp$ plane 1
$\Rightarrow \alpha + \theta = 90^\circ$ and $\beta + \gamma = 90^\circ$

since $\vec{M} \perp$ plane 2
$\Rightarrow \beta + \alpha = 90^\circ$ and $\gamma + \theta = 90^\circ$

Thus, since:

$$\left.\begin{array}{l} \alpha + \theta = 90^\circ \\ \text{and } \beta + \alpha = 90^\circ \end{array}\right\} \Rightarrow \left.\begin{array}{l} \alpha = 90^\circ - \theta \\ \alpha = 90^\circ - \beta \end{array}\right\} \Rightarrow 90^\circ - \theta = 90^\circ - \beta$$

$$\Rightarrow \boxed{\theta = \beta}$$

angle between the planes

angle between the normals.