

$\vec{a}$  在  $\vec{b}$  的正射影  $L$   

$$= \left( \frac{\vec{a} \cdot \vec{b}}{|\vec{b}|^2} \right) \vec{b}$$

$L_1$   
 $A(2,1,2)$   
 $H(2,-4,4)$   
 $H-A = (2,-4,4)$   
 $H = (2,1,2) + (2,-4,4) = (4,-3,6)$

$L_2$   
 $P(6,-4,4)$   
 $\sqrt{2^2+4^2+4^2} = 3$   
 $d(L_1, L_2) = \sqrt{2^2+4^2+4^2} = 3$

$\sin(180^\circ - \theta) = + \sin \theta$   
 $\cos(180^\circ - \theta) = - \cos \theta$   
 $\tan(180^\circ - \theta) = - \tan \theta$

$\sin(\theta \pm 180^\circ) = - \sin \theta$   
 $\cos(\theta \pm 180^\circ) = - \cos \theta$   
 $\tan(\theta \pm 180^\circ) = + \tan \theta$

$\sin(360^\circ - \theta) = - \sin \theta$   
 $\cos(360^\circ - \theta) = + \cos \theta$   
 $\tan(360^\circ - \theta) = - \tan \theta$

$\theta$   
 $\theta + 180^\circ$   
 $x \rightarrow -x$   
 $y \rightarrow -y$