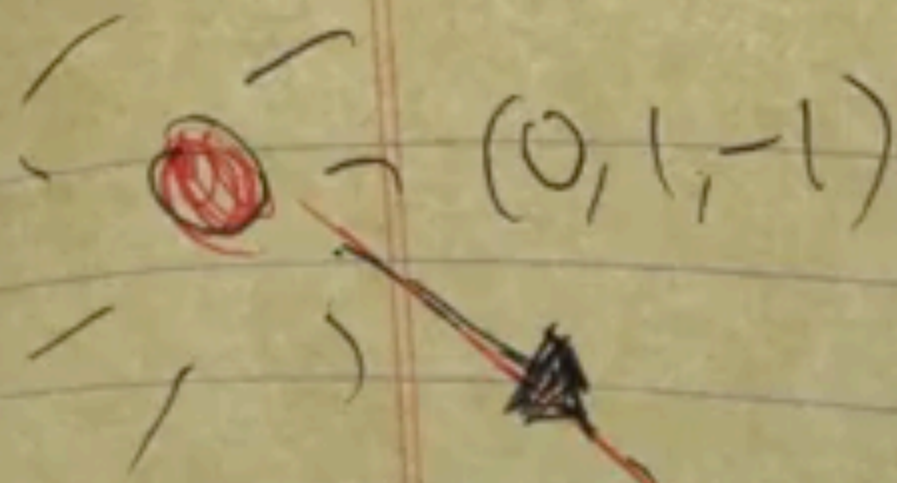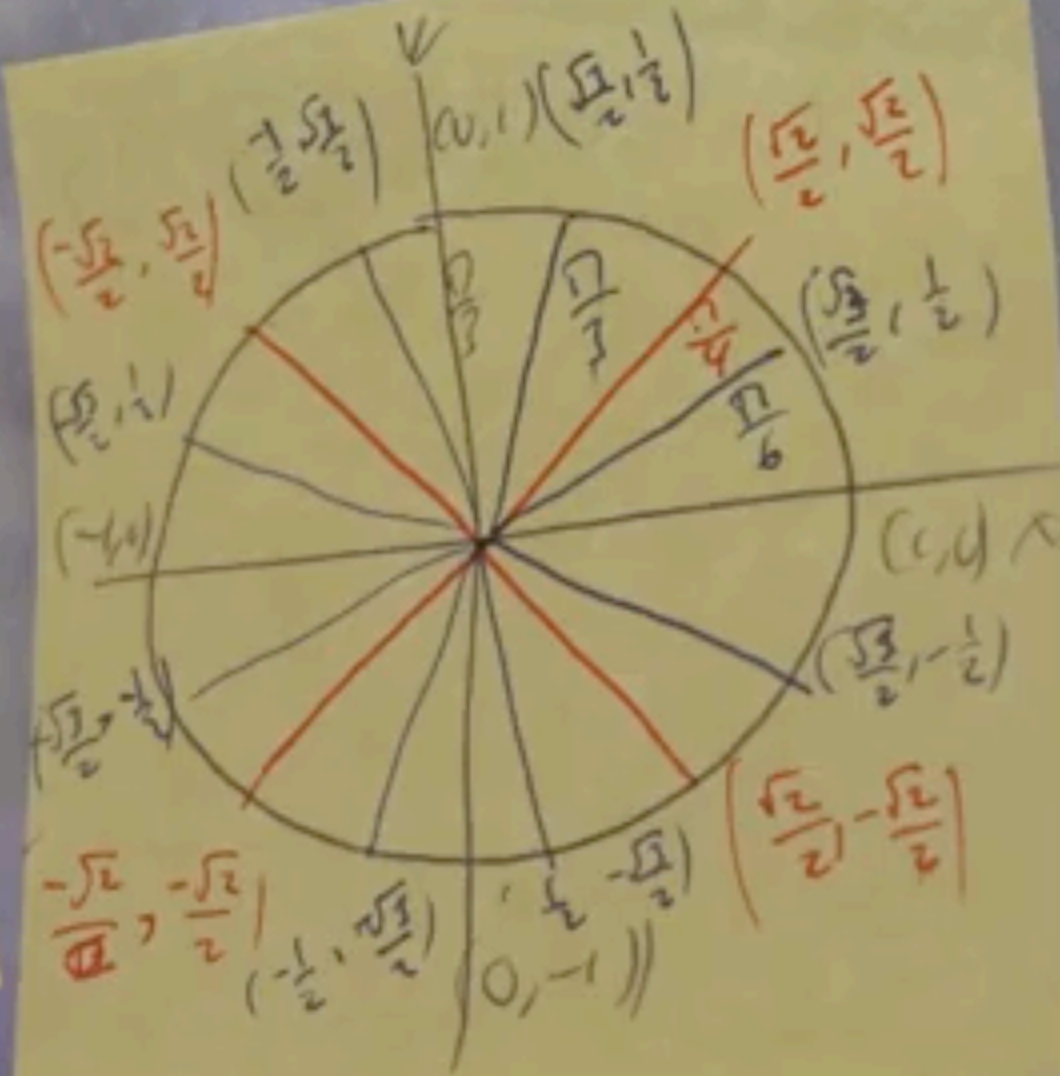# Session 1:
Coordinate Systems, Pixels and Geometric Transformations

$R_1 \cos\theta$

Norm

$|\vec{u}| = \sqrt{\vec{u} \cdot \vec{u}}$

$(0,1,-1)$

$L = (N_x, N_y, N_z) \cdot (0, 1, -1)$

(N_x, N_y, N_z)

$= 0 + N_y - N_z$

$= N_y - N_z$