

$$\mathbb{P} = \mathbb{R}P^3$$

$$A = [(1, 2, 3, 4)] \quad B = [(1, 0, 1, a)]$$

Retta (proiettiva) per A e B

$$\begin{pmatrix} x_0 & 1 & 1 \\ x_1 & 2 & 0 \\ x_2 & 3 & 1 \\ x_3 & 4 & 0 \end{pmatrix}$$

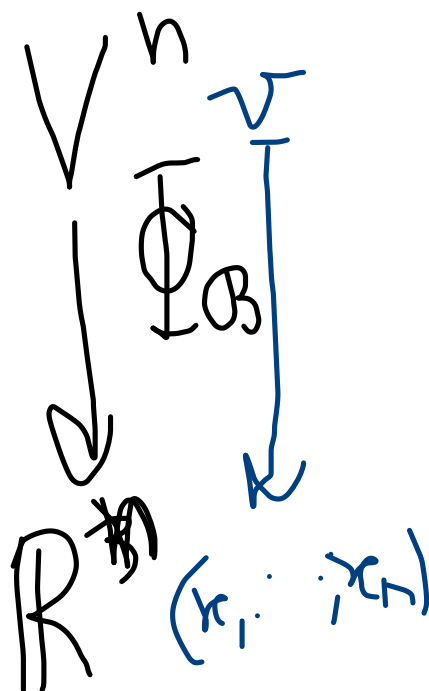
$\det T \neq 0$

$$\begin{cases} \begin{vmatrix} x_0 & 1 & 1 \\ x_1 & 2 & 0 \\ x_2 & 3 & 1 \end{vmatrix} = 0 \\ \begin{vmatrix} x_0 & 1 & 1 \\ x_1 & 2 & 0 \\ x_3 & 4 & 0 \end{vmatrix} = 0 \end{cases}$$

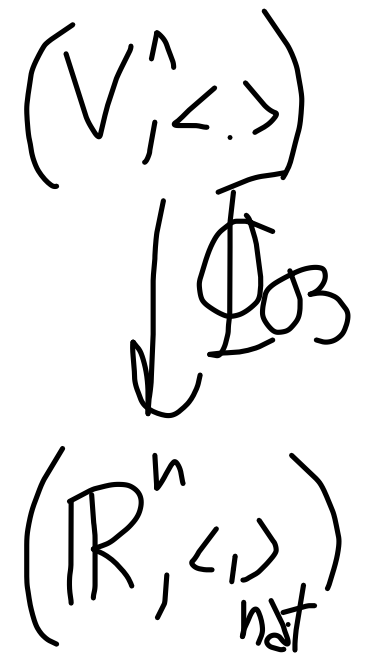
$$\left| \begin{array}{ccc|c} X_0 & 1 & 1 & 0 \\ X_1 & 2 & 0 & 0 \\ (X_2 - X_0) & 2 & 0 & 0 \end{array} \right| = \left| \begin{array}{cc|c} X_1 & 2 & 0 \\ (X_2 - X_0) & 2 & 0 \end{array} \right| = 2X_1 - 2X_2 + 2X_0 = 0$$

$$\left| \begin{array}{ccc|c} X_0 & 1 & 1 & 0 \\ X_1 & 2 & 0 & 0 \\ X_3 & 4 & 0 & 0 \end{array} \right| = \left| \begin{array}{cc|c} X_1 & 2 & 0 \\ X_3 & 4 & 0 \end{array} \right| = 4X_1 - 2X_3 = 0$$

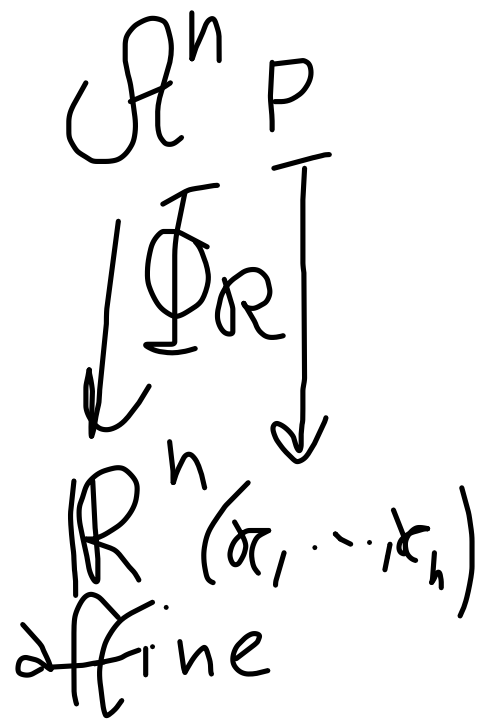
$$\left. \begin{array}{l} X_0 + X_1 - X_2 = 0 \\ 2X_1 - X_3 = 0 \end{array} \right\}$$



B
 base
 ordinata



B
 base
 ortogonale



\mathbb{R}
 riferimento
 affine

