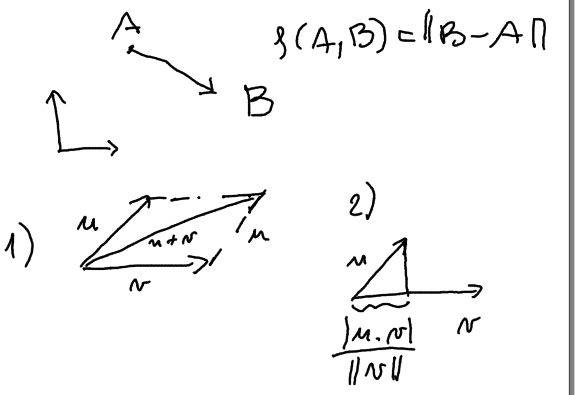
$\langle (x_1, x_2)^T, (z_1, z_2)^T \rangle =$

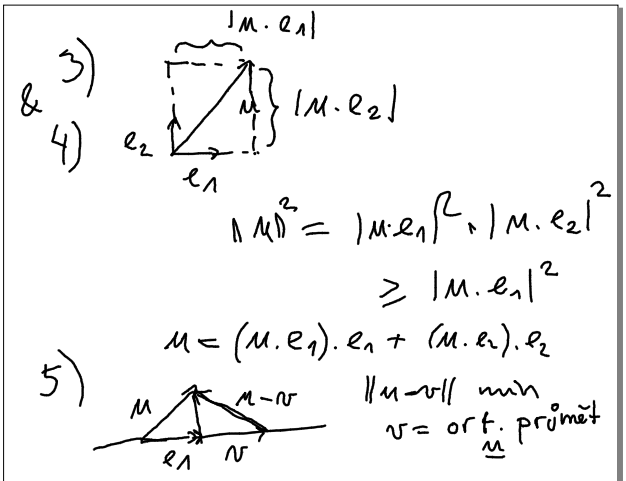
$(x_1, x_2) \cdot \begin{pmatrix} z_1 \\ z_2 \end{pmatrix} =$

$= x_1 z_1 + x_2 z_2$

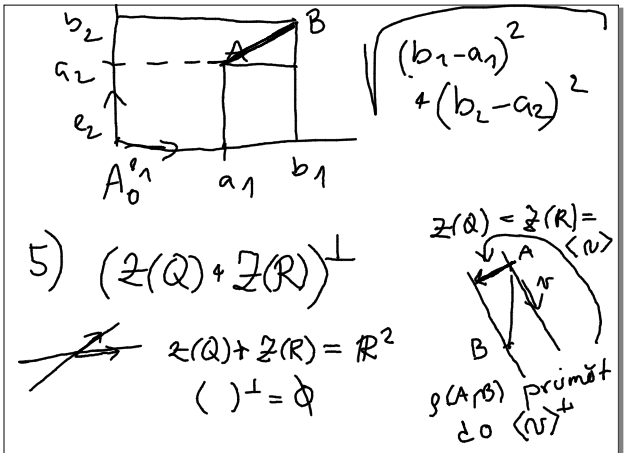
12 3-16:00



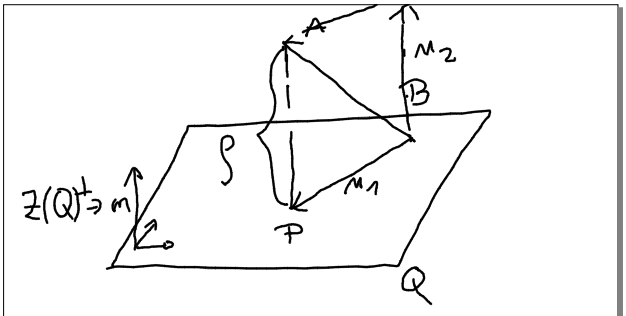
12 3-16:13



12 3-16:19



12 3-16:26



$\varrho = \varrho(A, Q)$

12 3-16:38

$(-1,2,3).n = 0$

$(-1,-2,1).n = 0 \rightsquigarrow$

$n = t.(-4,1,-2)$

$\varrho(Q)^\perp = \langle (-4,1,-2) \rangle$

$-n_1 + 2n_2 + 3n_3 = 0$

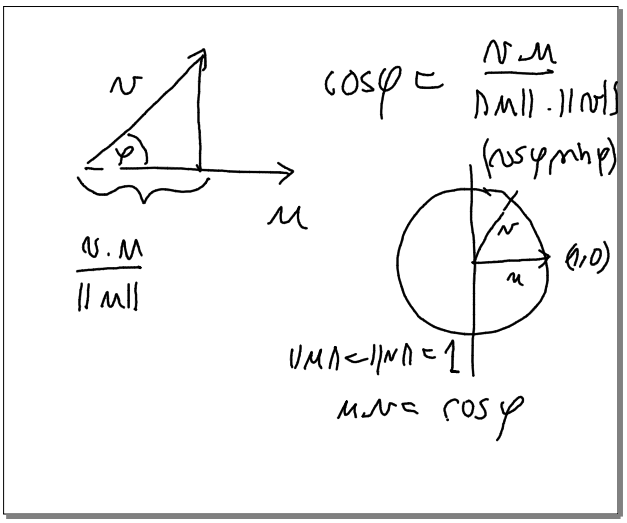
$-n_1 - 2n_2 + n_3 = 0 \rightsquigarrow$

$\left(\begin{array}{ccc|c} -1 & 2 & 3 & 0 \\ -1 & -2 & 1 & 0 \end{array}\right) \sim \left(\begin{array}{ccc|c} -1 & 2 & 3 & 0 \\ 0 & -4 & -2 & 0 \end{array}\right)$

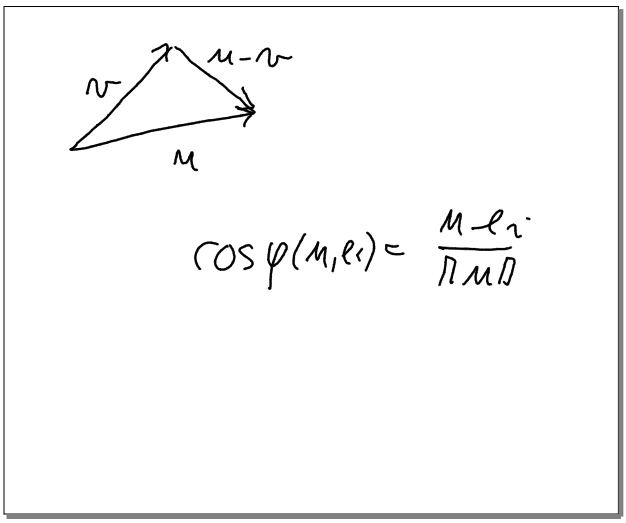
$n_2 = t, \ n_3 = -2t \qquad 2n_2 + n_3 = 0$

$-n_1 + 2t - 6t = 0 \Rightarrow n_1 = -4t$

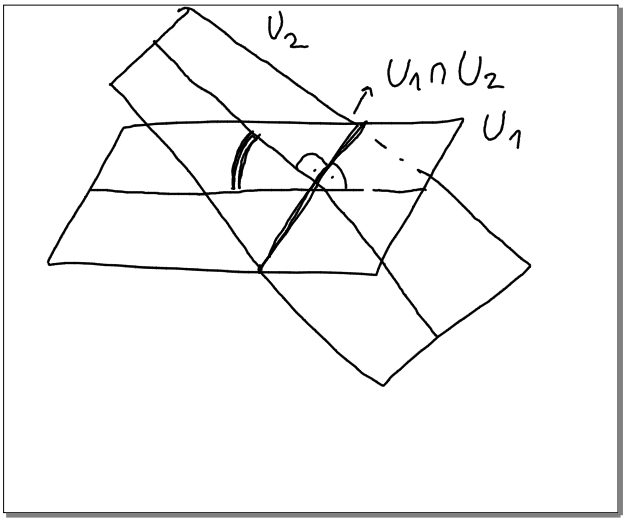
12 3-16:45



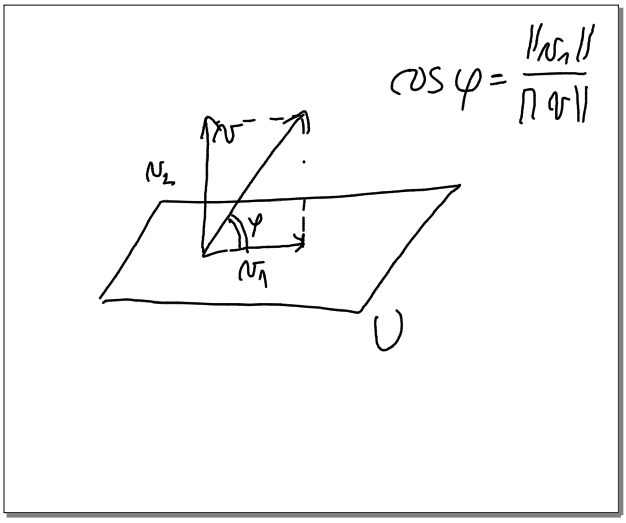
12 3-16:57



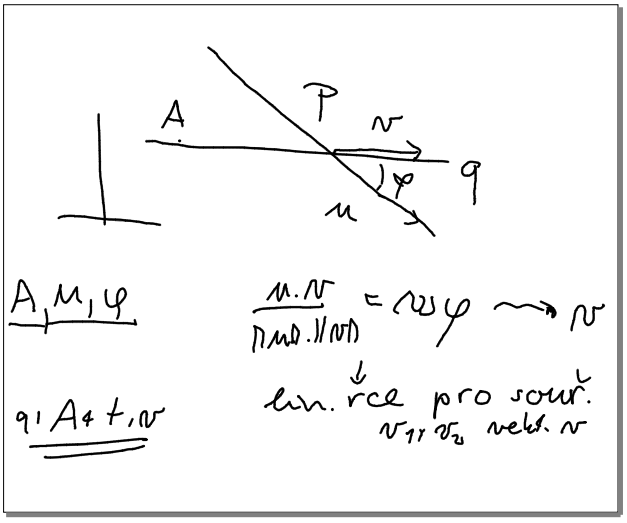
12 3-17:02



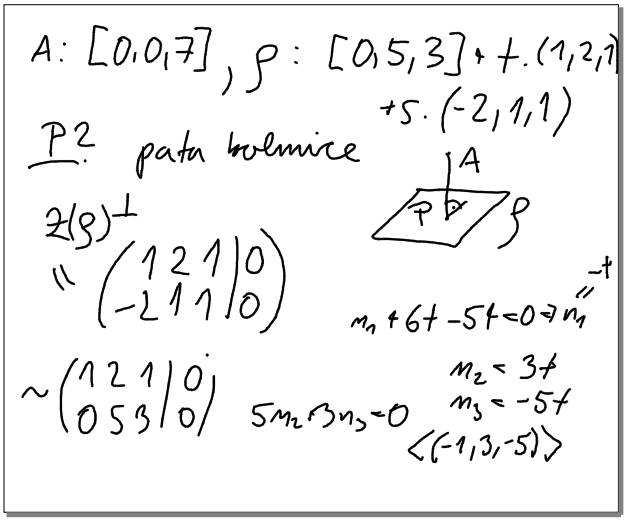
12 3-17:08



12 3-17:12



12 3-17:16



12 3-17:22

kolmica : $[0,0,7] + t\cdot(-1,3,-5)$ $= k$

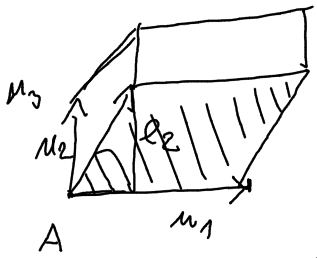
$P = k \cap \rho$

$\parallel$

$[0,5,3] + (1,2,1)\cdot r + (-2,1,1)\cdot s$

$$\left(\begin{array}{ccc|c} -1 & 1 & -2 & 0 \\ 3 & 2 & 1 & 5 \\ -5 & 1 & 1 & -4 \end{array}\right) \sim \dots$$

12 3-17:29



$dim = 1$ úsečka

$dim = 2$ rovnoběžník

$vol\, P_2 = e_2 \cdot vol\, P_1 = e_1 \cdot \| u_1 \|$

12 3-17:33

12 3-17:42