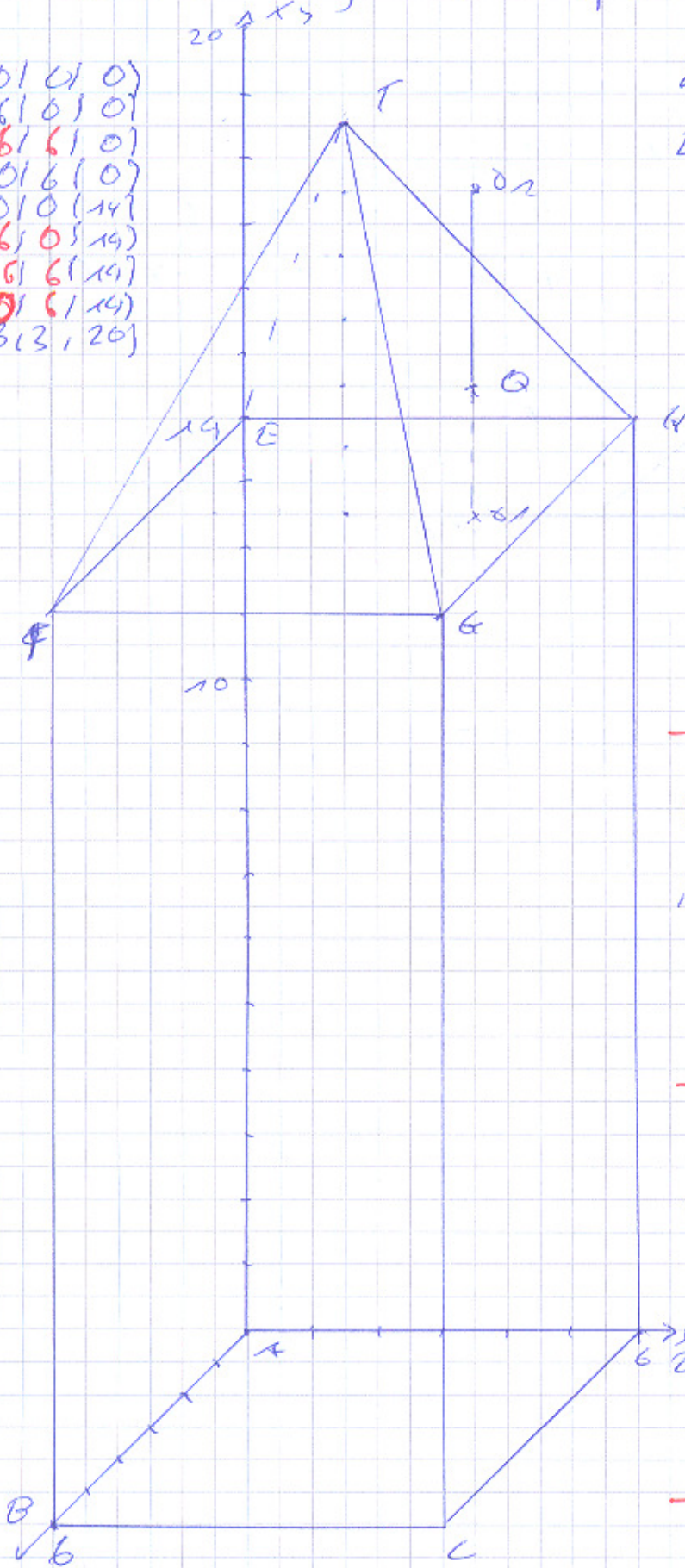


# Lösung Langzeit

(6)

- A(0|0|0)
- B(6|0|0)
- C(6|6|0)
- D(0|6|0)
- E(0|0|14)
- F(6|0|14)
- G(6|6|14)
- H(0|6|14)
- I(3|3|26)



$E_{RSK}: x_3 = x_4$   
 $E_{SKK}: \vec{x} = \begin{pmatrix} 6 \\ 6 \\ 14 \end{pmatrix} + s \begin{pmatrix} -6 \\ 0 \\ 0 \end{pmatrix} + t \begin{pmatrix} -3 \\ -3 \\ 6 \end{pmatrix}$   
 $\vec{x} = \begin{pmatrix} 6 \\ 6 \\ 14 \end{pmatrix} + t \begin{pmatrix} -1 \\ 0 \\ 0 \end{pmatrix} + 2 \begin{pmatrix} -1 \\ -1 \\ 2 \end{pmatrix}$

$E_{991}: 2x_2 + x_3 = 26$

$\cos \alpha = \frac{0 \cdot 0 + 0 \cdot 2 + 1 \cdot 1}{\sqrt{5} \cdot \sqrt{1}}$   
 $= 0,44$

$\alpha = 63,4^\circ$

$g_{D_2}: \vec{x} = \begin{pmatrix} 3 \\ 5 \\ 14 \end{pmatrix} + r \begin{pmatrix} 0 \\ 0 \\ 1 \end{pmatrix}$

in  $E_{SKK}$ :

$10 + 14 + r = 26$   
 $r = 2$

$O(3|5|16)$

$HNF: 2x_2 + x_3 - 26 = 0$

$D_2$  in HNF

$D_2(3|5|9)$

$\frac{10 + 19 - 26}{\sqrt{5}} = d$

$d = 1,34 \text{ m}$

**[2 P.]**