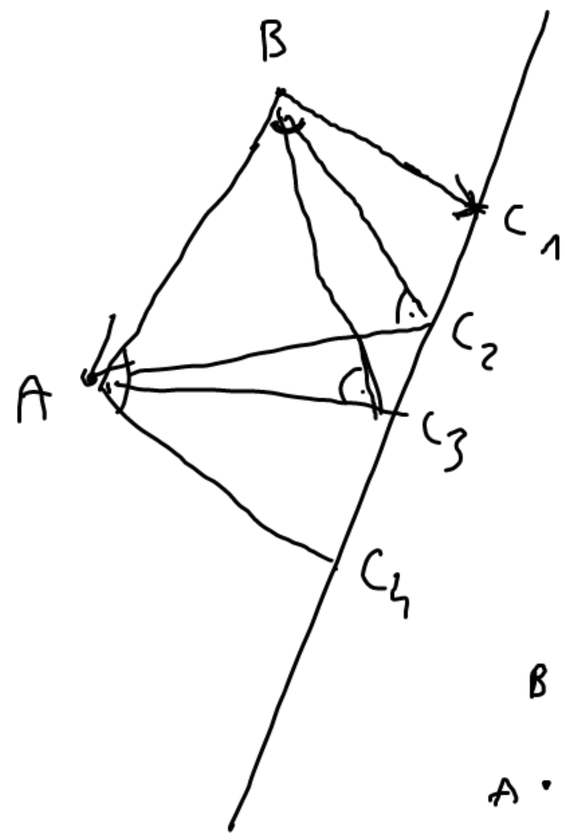
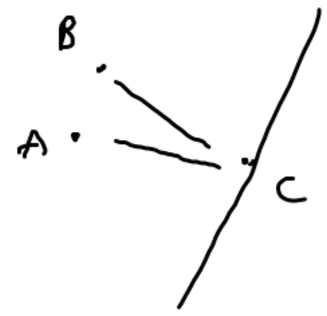
$A = (0,0,0) \quad B = (3,4,0) \quad C = (3t, 4t, 1+t)$





- ~~$\sphericalangle ABC = \frac{\pi}{2}$~~ : $\sphericalangle BAC = \frac{\pi}{2}$

$\vec{BA} = (-3,-4,0) \qquad \vec{AC} = (3t, 4t, 1+t)$

$\vec{BA} \perp \vec{AC} \iff \vec{BA} \circ \vec{AC} = 0$

$-9t - 16t + 0 = 0$

$\underline{t = 0}$

- $\sphericalangle BCA = \frac{\pi}{2}$:

$\vec{CB} = (3-3t, 4-4t, -1-t) \qquad \vec{CA} = (-3t, -4t, -1-t)$

$\vec{CB} \perp \vec{CA} \iff \vec{CB} \circ \vec{CA} = 0$

$(3-3t)\cdot(-3t) + (4-4t)(-4t) + (-1-t)^2 = 0$

$-9t + 9t^2 - 16t + 16t^2 + 1 + 2t + t^2 = 0$

$26t^2 - 23t + 1 = 0$

$\Delta = 23^2 - 4 \cdot 26 = \ldots \qquad > 0$

$t_1 = \ldots \qquad \vee \qquad t_2 = \ldots$

- $\sphericalangle ABC = \frac{\pi}{2}$

$(\ldots)$