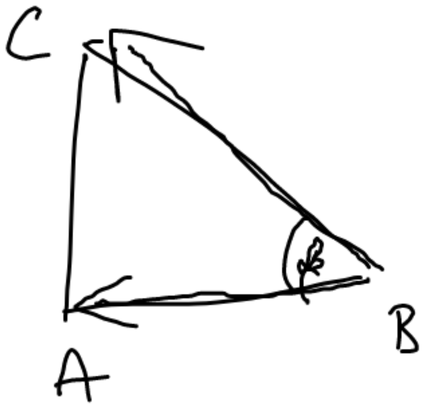
$A=(2,-1,3) \quad B=(1,1,1) \quad C=(0,2,5)$



$$|\vec{BA}| = \sqrt{(1)^2+(2)^2+(-2)^2} = \sqrt{9} = 3$$

$$\vec{BA} = [+1, -2, +2]$$

$$\vec{BC} = [-1, -1, 4]$$

$$|\vec{BC}| = \sqrt{1+1+16} = \sqrt{18}$$

$$\begin{cases} \vec{BA} \cdot \vec{BC} = |\vec{BA}| \cdot |\vec{BC}| \cdot \cos\beta \end{cases}$$

$$\cos\beta = \frac{-1+2+8}{3\sqrt{18}} = \frac{3\sqrt{18}}{18} = \frac{\sqrt{18}}{6} = \frac{\sqrt{2}}{2} \qquad \beta = 45^\circ$$

$$\left(\beta = \arccos\frac{\sqrt{2}}{2} = 45^\circ = \frac{\pi}{4} \right)$$