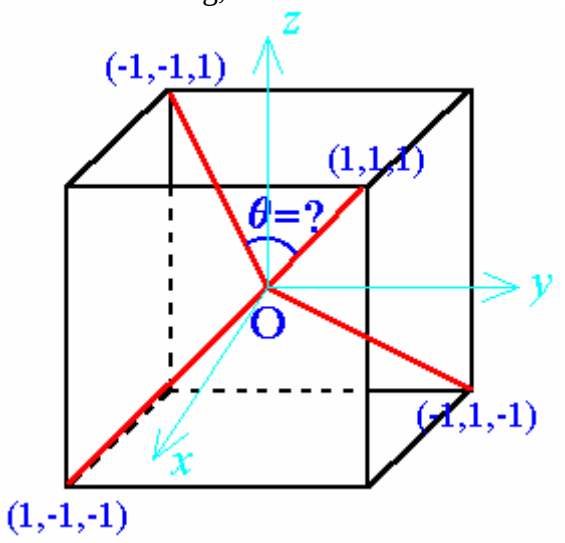
Kittel (7th Edition). Chapter 1. Problem 1.



Dot product of the vectors (1,1,1) and (-1,-1,1) = -1.

$|(1,1,1)| = |(-1,-1,1)| = \sqrt{3}$

$\therefore \quad |(1,1,1)||(-1,-1,1)| \cos\theta = -1$

$\Rightarrow \quad 3\cos\theta = -1$

$\Rightarrow \quad \theta = \cos^{-1}\left(\frac{1}{3}\right) = \underline{\underline{109.47^{o}}}$, or $\underline{\underline{109^{o}28'}}$