## Realization of a regular tetrahedron in 4 - dimensional space

One of the simplest and most symmetric ways to view a regular tetrahedron is to think of it as living in $\mathbf{4}$ - dimensional space such that its four vertices are the standard unit vectors. If we do so, then the average of the vertices turns out to be the geometrical center of the tetrahedron. Additional Exercise 2 is asking for the measurement of the central angle $\angle \mathbf{e}_{1} \mathbf{b e}_{2}$, which is drawn in red. Since the figure is symmetric, this value equals the of the measurement of the angle $\angle \mathbf{e}_{\mathbf{i}} \mathbf{b} \mathbf{e}_{\mathbf{j}}$, where $\mathbf{i}$ and $\mathbf{j}$ can be any two distinct whole numbers from $\mathbf{1}$ to 4 .


