

1077-VJ-1348 **Steven Schlicker*** (schlicks@gvsu.edu). *What can a right triangle look like?*

We all know what a right triangle looks like – or do we? The picture we have in our minds is likely based in Euclidean geometry in the plane, but that is not the only possibility. In this presentation we discuss the concept of orthogonality in the space of nonempty compact subsets of n -dimensional real space and describe how Euclidean orthogonality of compact sets is similar to and different from our standard view of orthogonality. The presentation will include pictures of several seemingly odd right triangles. (Received September 19, 2011)