

**Remark 9.3.** [2CD] Consider a polygonal curve, with  $n$  vertexes labeled  $V_1, \dots, V_n$ ; this bounds a polygon: how many sides does it have? It depends. If some vertexes (in sequence) are aligned, then the figure in the plane will visually have less than  $n$  sides and vertexes. For this reason, we will distinguish the unlabeled polygon (which is the subset of the plane) from the labeled polygon (in which we also take into account the position of the vertexes); the latter is less intuitive, but makes for better mathematics. See figure ?? on page ??.