The 3D visibility (graph) drawing is a graph drawing in IR3 where vertices are represented by 2D sets placed into planes parallel to xy-plane and the edges correspond to z-parallel visibility among these sets. We continue the study of 3D visibility drawing of complete graphs by rectangles and regular polygons. We show that the maximum size of a complete graph with a 3D visibility drawing by regular n-gons is O(n4). This polynomial bound improves signifficantly the previous best known (exponential) bound 6n3 3n1 3 26n.We also provide several lower bounds. We show that the complete graph K2k+3 (resp. K4k+6) has a 3D visibility drawing by regular 2k-gons (resp.(2k + 1)-gons). We improve the best known upper bound on the size of a complete graph with a 3D visibility drawing by rectangles from 55 to 50. This result is based on the exploration of unimodal sequences of k-tuples of numbers. A sequence of numbers is unimodal if it rst increases and then decreases. A sequence of k-tuples of numbers is unimodal if it is unimodal in each component. We derive tight bounds on the maximum length of a sequence of k-tuples without a unimodal subsequence of length n. We show a connection between these results and Dedekind numbers, i.e., the numbers of antichains of a power set P(1; : : : ; k) ordered by inclusion.