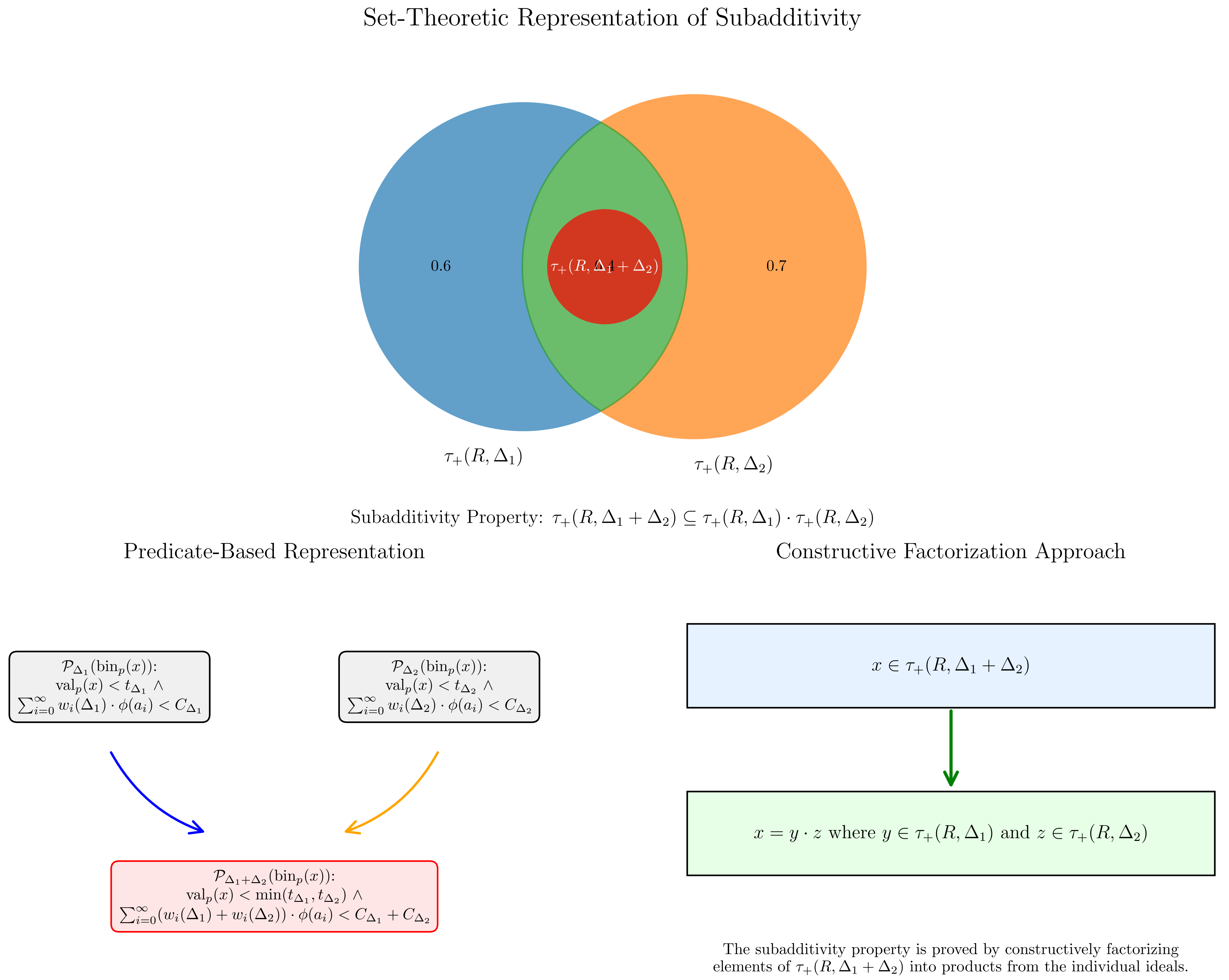

Figure: Visualization of the subadditivity property for test ideals. The top panel shows a set-theoretic representation. The bottom left panel illustrates the predicate-based characterization. The bottom right panel demonstrates the constructive factorization approach used in the proof.