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Given a finite $S \subseteq \mathbb{R}^d$, how many convex sets are required to write the complement as a union? Crude estimates of the number of convex sets required are given. When the restriction of openness is added, tighter bounds are obtained as an application of a theorem of Björner and Kalai. Certain families of graphs and hypergraphs connected with the problem are introduced. (Received September 09, 2008)