In this talk, we discuss properties of $m$-convex sets, which are sets such that for any $m$ points, some line segment between two of them is entirely contained in the set. We give a necessary and sufficient condition for a set to be 3-convex, namely, that for every point $p \in S$, $S$ is the union of a star-shaped set centered at $p$ and a convex set. (Received September 27, 2005)