1009-52-122 Andreas Holmsen* (andreash@mi.uib.no), Department of Mathematics, Johannes Brunsg. 12, 5008, Bergen, Norway. The Katchalski-Lewis transversal problem in \mathbf{R}^d .

Let F be a family of disjoint translates of a compact convex set in the plane. In 1980 Katchalski and Lewis showed that there exists a constant k, independent of F, such that if every three members of \mathcal{F} are met by a line, then a "large" subfamily $G \subset F$, with $|F \setminus G| \leq k$, is met by a line. We present a higher-dimensional analogue containing the original Katchalski-Lewis result. (Received August 11, 2005)