

factors have a compact product³ and the product of the remaining factors is metrisable.⁴

REMARK. In Theorem 4, the hypothesis that the factor spaces be metric cannot be much weakened. This is shown by an example of R. H. Sorgenfrey (see [4]), in which the product of a paracompact (and thus fully normal) space with itself is not even normal.

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³ A theorem of Tychonoff; see, for example, [5, p. 75] for a simple proof.

⁴ See, for example, [3, p. 88].

TRANSITIVITY AND EQUICONTINUITY¹

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Let X be a metric space with metric ρ and let G be a group of homeomorphisms on X . If $x \in X$ and $g \in G$, then xg denotes the image of the point x under the transformation g . If $x \in X$ and $F \subset G$, then xF denotes $\bigcup_{g \in F} xg$. G is said to be *algebraically transitive* provided that $xG = X$ for some $x \in X$ (and therefore for every $x \in X$). G is said to be *topologically transitive* provided that $(xG)^* = X$ for some $x \in X$, where the star denotes the closure operator. G is said to be *equicontinuous* provided that to each $\epsilon > 0$ there corresponds $\delta > 0$ such that $x, y \in X$ with $\rho(x, y) < \delta$ implies $\rho(xg, yg) < \epsilon$ ($g \in G$).

With respect to the following lemma compare [4].²

LEMMA. *If X is a complete separable metric space and also a multiplicative group, if the center of X is dense in X and if the function xy*

Presented to the Society, December 31, 1947; received by the editors November 29, 1947.

¹ Prepared under the sponsorship of the Office of Naval Research.

² Numbers in brackets refer to the bibliography at the end of the paper.