ABSTRACT. The literature of approximation theory is pervaded with results which can be derived from one of various forms of the Hahn-Banach theorem. One of the most striking examples of this is the celebrated Chebyshev alternation theorem (see [9, p.91], [4] or [15]). In the present exposition we have attempted to highlight such results by showing how they can all be deduced from a *single* geometric implication (Theorem 2.3) of the extension theorem.

Our technique is one of embedding the result to be proved in an appropriate geometric environment and then applying Theorem 2.3. Once this environment is made clear, the proof often becomes apparent (see, e.g., Corollaries 3.1 and 3.6). An instance where the proof is not obvious from this geometric viewpoint occurs in Theorem 3.9 where we have recovered a result of Garkavi [8]. In any event, this approach has the distinction of being geometrical rather than analytical which tends to make the proofs easier to find, understand, and recall.