book; but one could hope to intoduce each of them and include at least one nontrivial result for each.

Proof Theory has largely gone its own way, and can be treated briefly in a general logic text. Most important is the Gentzen method of elimination of cuts, which should be discussed at least briefly.

Finally, there are subjects which cut across these fields. Most notable is the theory of admissible sets, which is both a unifying idea and a valuable tool. One would hope to include an introduction to this topic.

How well does Manin's book cover this material? The basic material on first-order logic is there and is done well. The only result in Model Theory is the Löwenheim-Skolem Theorem. In Recursion Theory, he covers the material mentioned above through the arithmetical hierarchy, but with some essential results (like the Enumeration Theorem for partial recursive functions) missing. In set theory, constructible sets and forcing (in the Boolean model form) are treated fairly extensively, but the other advanced topics are not mentioned. There is no Proof Theory and no mention of admissible sets.

On the other hand, Manin has proved several significant results not in the above list, e.g., Higman's Theorem on embeddings in finitely presented groups and the Kochen-Specker results on quantum logics. There is no doubt that these results and their proofs are interesting; but the techniques are special to the problem and not of much general use.

After this long discussion on content, a word about style. The book meets reasonable standards of clarity and elegance; but it's outstanding feature is its liveliness. Manin is interested in everything; and there are many (perhaps too many) asides on topics connected in some way with logic. No one should be bored by this book.

A lively book treating the fundamentals of logic and some important advanced topics–surely this is enough to make the book worthwhile. Still, I cannot help looking forward to the book which will treat most of the topics above in an equally lively way. It will surely be the logic textbook for the 1980s.

J. R. SHOENFIELD

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Saks spaces and applications to functional analysis, by J. B. Cooper, Mathematics Studies, Vol. 28, North-Holland, Amsterdam, New York, Oxford, 1978, x + 325 pp.

The term "Saks space" has no fixed meaning in the literature, but it always refers to some variant of the following situation: a normed vector space $(E, \| \ \|)$ provided with a distance function or a topology τ. Depending on the author, a Saks space is either a triple $(E, \| \ \|, \tau)$ or a pair (B, τ_B) where B is the unit ball $\{x \in E: \|x\| \leqslant 1\}$ and τ_B is the induced metric or topology. The conditions imposed on E, $\| \ \|$ and τ may vary; usually it is assumed that

(*) τ is coarser on E than the norm topology and B is closed in (E, τ), together with further restrictions like metric completeness of (B, τ_B) or local