sets. That same statement could be made, of course, about the entire book. We are among those who are applauding.

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A. W. ROBERTS
D. E. VARBERG

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Counterexamples in topological vector spaces, by S. M. Khaleelulla, Lecture Notes in Math., vol. 936, Springer-Verlag, Berlin and New York, 1982, xxi + 179 pp., $10.70.

Here is a rule-of-thumb test to identity latent mathematicians: Make an assertion. If the young person tries to prove it, (s)he fails the test; if (s)he tries to find a counterexample, you have a future mathematician on your hands.

Examples are more important than theorems. If you teach me the rules of a game and attempt to develop a theory, I will interrupt to say "Let's play it once". A course in groups containing pure theory would allow the conjecture "All groups are commutative" to stand unchallenged—besides failing to educate the students.

The role of examples is educational: the derivative of a specific function, a group with 5 members; but we shall be concerned with those which are always thought of as counter: a nowhere differentiable function, a nonmeasurable set.

Is the earliest known counterexample the book of Job? (Assertion: Holiness brings good fortune.)

What is the role of counterexamples in mathematics? (Are there any in Euclid?) I attempt to list the roles in decreasing order of importance; the "big" examples fall early in my list:

1. To refute widely held beliefs. (A nowhere differentiable continuous function, a series whose sum is discontinuous.)

2. To show the need to work in a more general setting. (A nonsequential limit point.)

3. To show the inadequacy of a definition. (Space-filling curve: what does dimension mean?).