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Cover: The human immunodeficiency virus, shown here in its mature form, is credited with causing AIDS. But many researchers think some other factor — in addition to infection with the virus — is needed before AIDS develops. Genetics or other viruses could be to blame. (Photo: Zaki Salahudden/National Cancer Institute)

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Letters

In defense of math

David Bronson's statement that "mathematical thinking is so restricted" and implication that the only need for students of mathematics is "to produce more mathematicians - for the restricted uses we have for them" (Letters, SN:3/7/87, p.147) require comment.

One of the major benefits of studying mathematics is that practice with "mathematical thinking" teaches students to think logically and critically and to pay attention to detail. These are the "critical skills" which Bronson claims are peculiar to reading and writing. Attempts to teach these skills in reading and writing curricula have proved less effective than teaching them within a mathematics curriculum - perhaps because the simplified structure of mathematics (as compared to a natural language) makes it easier to focus on

The beliefs that only mathematicians need

to study mathematics and that mathematicians have only limited utility are absurd. There is a nationwide shortage of competent computer scientists, statisticians, operations research analysts and other mathematical professionals. Examples of the crucial need for mathematical training in other professions are ubiquitous. Some civil engineers seem to spend 50 percent of their time solving differential equations. I can recall my father, an architect, bringing home complicated equations that he needed to solve to guarantee the integrity of structures he was designing. In my own experience, I have encountered governmental administrators and private sector managers whose lack of elementary knowledge of probability and statistics has put them at the mercy of other people's interpretations of risk assessments and the like.

At a time when the required levels of mathematical sophistication are increasing in virtually all professions and when the proportion of individuals without minimal

numeracy seems to be increasing, it is disappointing to see that the need for improved mathematical training is not universally recognized.

> Patrick W. Crockett Ruston, La.

The Rorschach risk

I enjoyed "The Character of Cancer" (SN: 2/21/87, p. 120) but wish you had included the Rorschach inkblot so readers could decide what they saw. Would it be possible for you to run the inkblot in an upcoming issue?

J. Morris Arlington, Va.

I originally wanted to include an inkblot with the article, but was dissuaded by a psychologist who uses the Rorschach test. He argued that people who take the test in the future as part of a psychological assessment will give biased responses if they have already seen the inkblots in a magazine. - B. Bower

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