



University students failing in basic mathematics

1 out of 5 pupils unable to solve simple problems

One out of five students at private universities cannot solve questions on mathematics at the primary school level despite being enrolled in courses that require some knowledge of the subject, a survey released Saturday revealed.

The survey results underscored a report issued last month by the University Council, an advisory body to the education minister, that called for entrance examinations to test potential university students on high school subjects relevant to their further education.

The survey covered about 5,000 first- and second-year students, mostly at economics department, of eight state-run universities and 11 private institutions. It was conducted in April by **Kyoto University Prof. Kazuo Nishimura.**

The students, who encounter math in lectures every day, were asked to solve 25 basic questions on areas of the subject that they had studied before high school.

Of students at one private university's economic department, 82 percent of the respondents were able to answer one primary school-level question correctly. The entrance exam for the department does not include a mathematics test.

The students at the second private university did only slightly better, registering a pass rate of 86 percent.

The figure fell for questions at the middle school level, with the two universities registering success rates of 56 percent and 77 percent, respectively.

When tested on quadratic equations taught in the third year of middle school, only 13 percent of students at the former university and 28 percent at the latter could give the correct answer.

“Students who want to study economics at the university level should at least be tested in

mathematics in entrance exams," Nishimura said.

Sample questions

Q1: $3 \times \{5 + (4 - 1) \times 2\} - 5 \times (6 - 4 + 2) =$

Q2: Determine the values of x and y in the following equations.

$$3x + y = 17$$

$$2x + 5y = 3$$

Q3: Determine the value for x in the following equation.

$$x^2 + 2x - 4 = 0$$