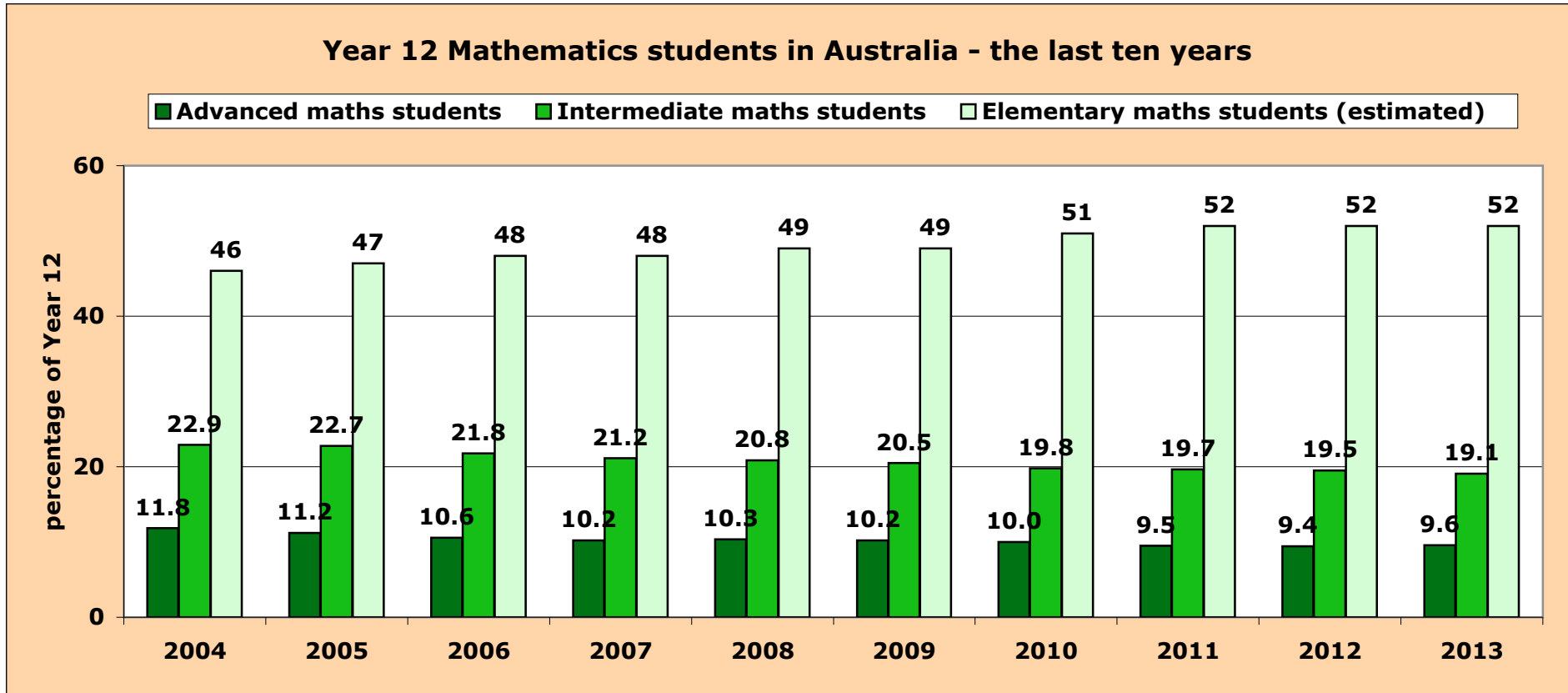


AUSTRALIAN MATHEMATICAL SCIENCES INSTITUTE

YEAR 12 MATHEMATICS STUDENT NUMBERS - UPDATE

This summary for the ten years 2004 to 2013 inclusive is of all Year 12 mathematics students enrolled through the secondary boards of studies in the six states (NSW, VIC, QLD, WA, SA, and TAS) and in the two territories (ACT and NT) together with Australian IBO (International Baccalaureate) students.



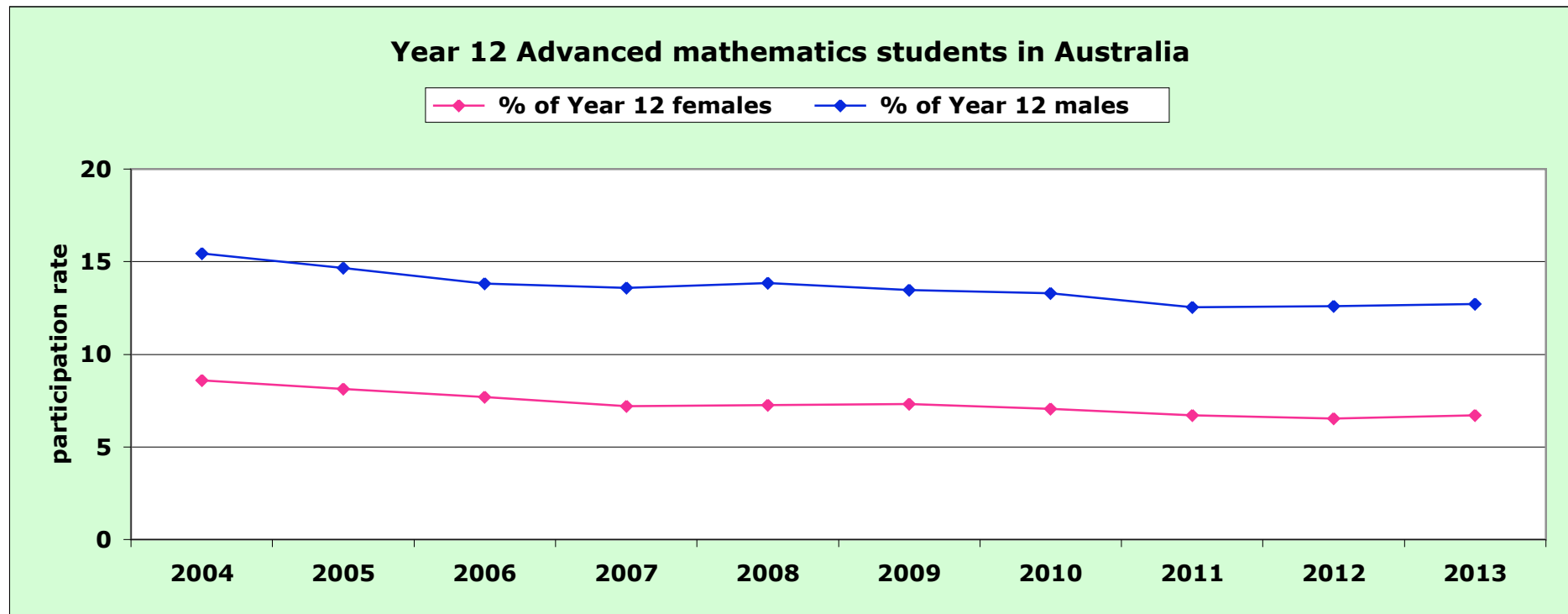
Some gender differences are noted below.

ADVANCED MATHEMATICS STUDENTS

The 2013 Advanced mathematics percentage participation rate of 9.6% is up from 9.4% in 2012. This is the first significant rise in the Advanced rate since our records began in 1995.

The actual NUMBER of Australian Advanced mathematics students (21,200 in 2013) is the highest for three years (21,300 in 2010). However, measured against the ever-increasing Year 12 total population (approximately 213,000 in 2010 versus 221,000 in 2013) the percentage participation rate is now lower.

Girls continue to be under-represented in Advanced mathematics. In 2013, 6.7% of girls took Advanced mathematics, compared with 12.7% of boys. (The overall Advanced rate of 9.6% for 2013 is slightly less than the arithmetic mean of the female and male rates, the reason being that females outnumber males in Year 12.)

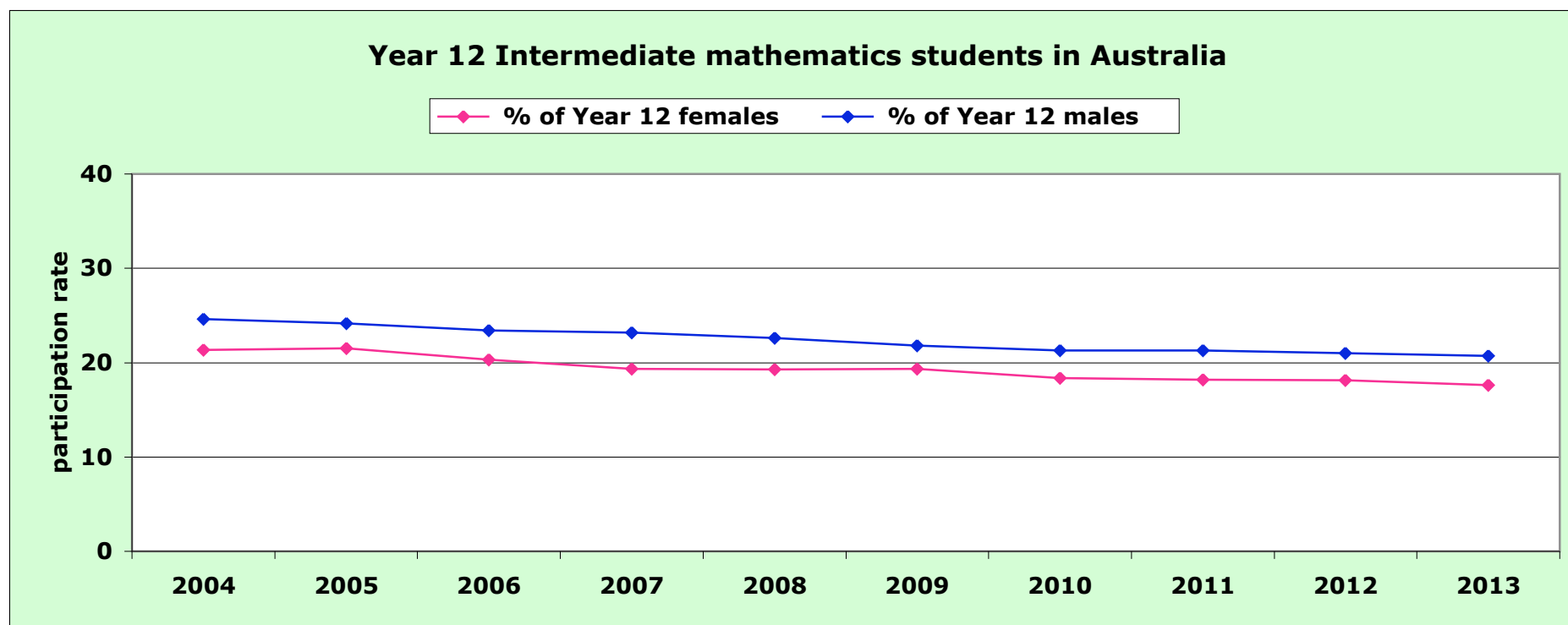


INTERMEDIATE MATHEMATICS STUDENTS

Intermediate mathematics students are those enrolled in an Intermediate mathematics subject but NOT enrolled in an Advanced mathematics subject. In 2013 there were approximately 42,200 Intermediate mathematics students. Intermediate mathematics subject ENROLMENTS totalled about 60,000. Most Australian Advanced mathematics students are simultaneously enrolled in an Intermediate subject.

Girls are under-represented among Intermediate mathematics students, but not severely so. In 2013, 17.6% of Year 12 girls were Intermediate mathematics students, compared with 20.7% of boys.

Both the Intermediate participation rates (girls, boys) appear to be trending downwards still.



ELEMENTARY MATHEMATICS STUDENTS

Elementary mathematics students are those enrolled in one or more Elementary mathematics subjects but NOT enrolled in an Intermediate mathematics subject NOR in an Advanced mathematics subject.

A graph of the female and male Elementary participation rates is uninteresting, because the male and female rates are virtually the same, and have been so for some years. (See page 1: the Elementary participation rate of 46% in 2004 has climbed since then.)

Yet for each of the last ten years, the NUMBER of female Elementary mathematics students has clearly exceeded the NUMBER of males, by virtue of the general female/male imbalance in Year 12 as a whole.

In 2013 there were approximately 115,000 Australian Year Elementary mathematics students, with a participation rate of 52%. Enrolments in Elementary mathematics subjects exceeded 120,000.

GENERAL

Overall, just over 80% of Year 12 students took some mathematics in 2013.

Of the girls, 76% took some mathematics in Year 12 during 2013, compared with 85% of the boys.

Accuracy matters: Advanced and Intermediate participation rates are quoted to the nearest 0.1%. Since the last ten-year update was released a year ago, in our records some small retrospective adjustments have been made both to enrolment numbers and to reference populations (total Year 12), following advice from some of the secondary boards of studies. As a consequence, some previously quoted Advanced and Intermediate participation rates have been amended by 0.1%. For example, the 2012 Intermediate mathematics participation rate of 19.4% quoted at this time last year has been amended to 19.5%, while the 2012 Advanced rate of 9.4% did not require amendment, remaining correct to the nearest 0.1%. The graphs are not visibly altered.

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