

Black-White Gaps in Mathematics Coursetaking Patterns

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20th Anniversary Conference
National Assessment Governing Board

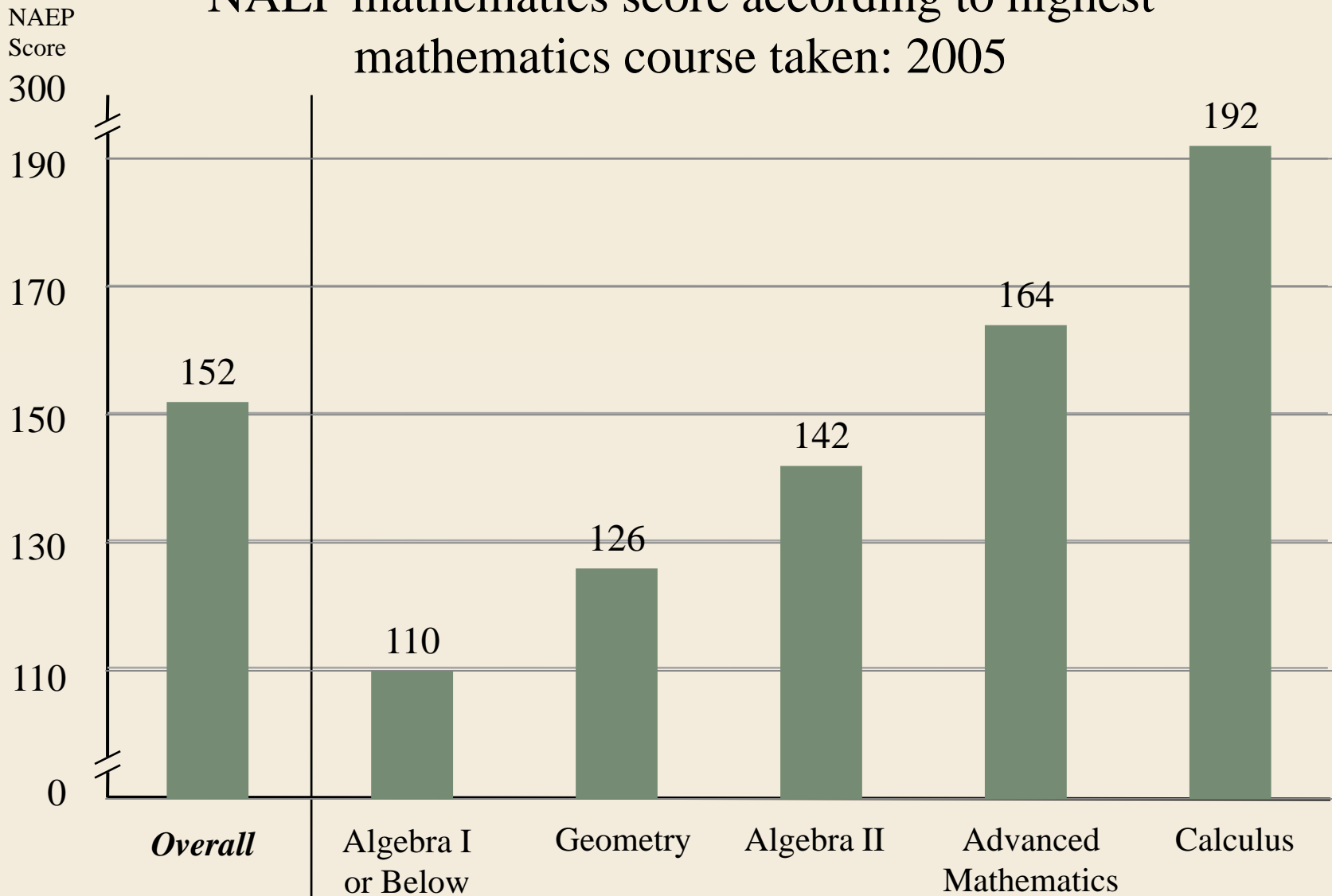
March 4, 2009

“I advise my students to listen carefully the moment they decide to take no more mathematics courses. They might be able to hear the sound of closing doors.”

- James Caballero

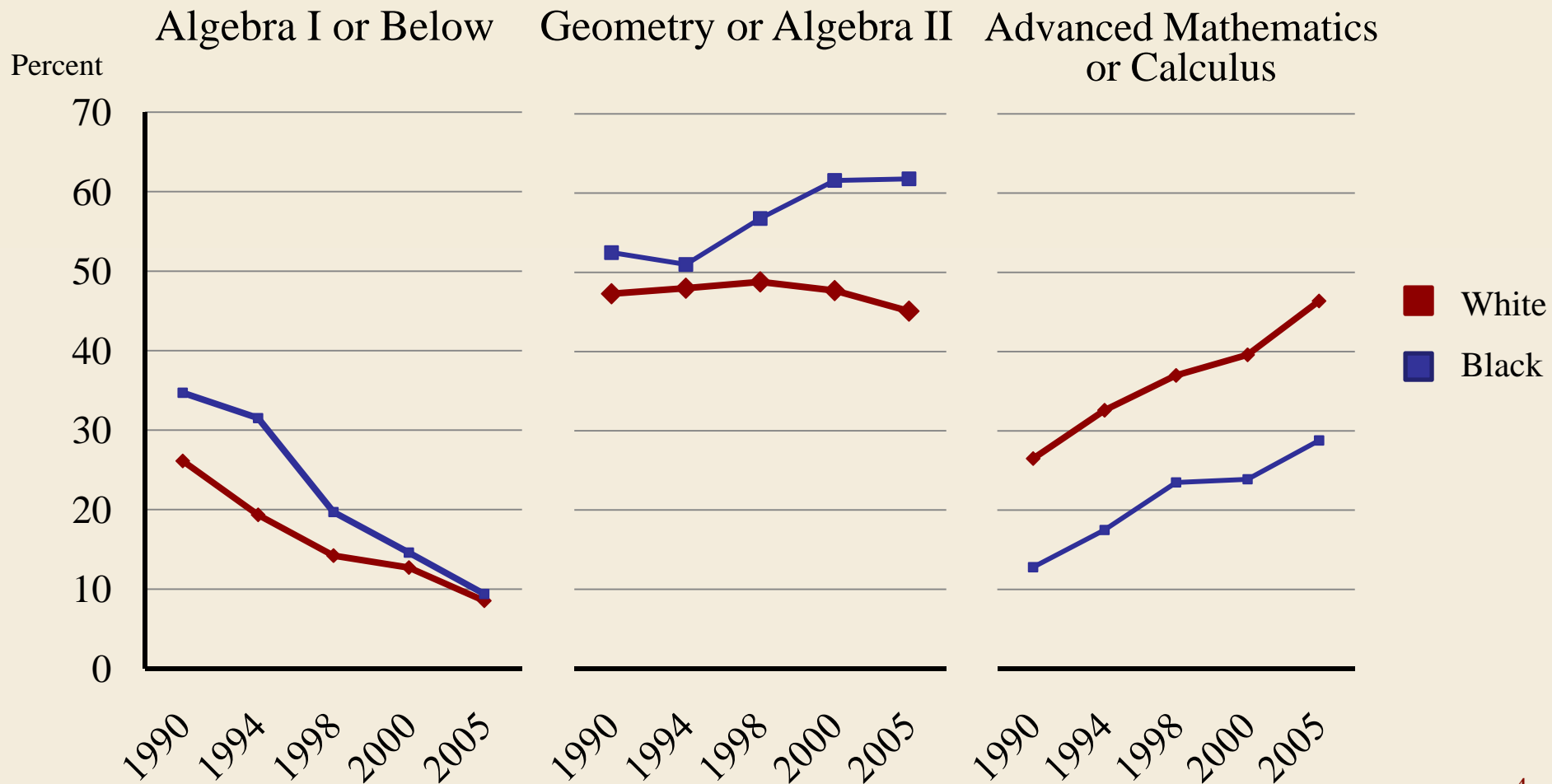
Mathematics teacher and author of Geometry Games

NAEP mathematics score according to highest mathematics course taken: 2005



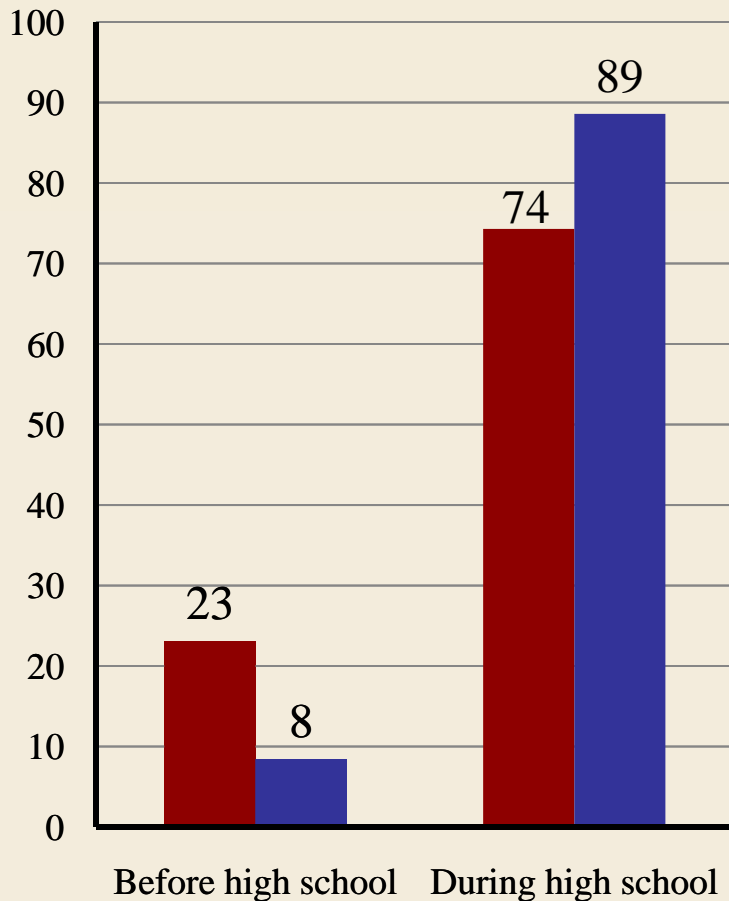
Improvements in Coursetaking

Highest mathematics course taken by high school graduates, by race: 1990-2005

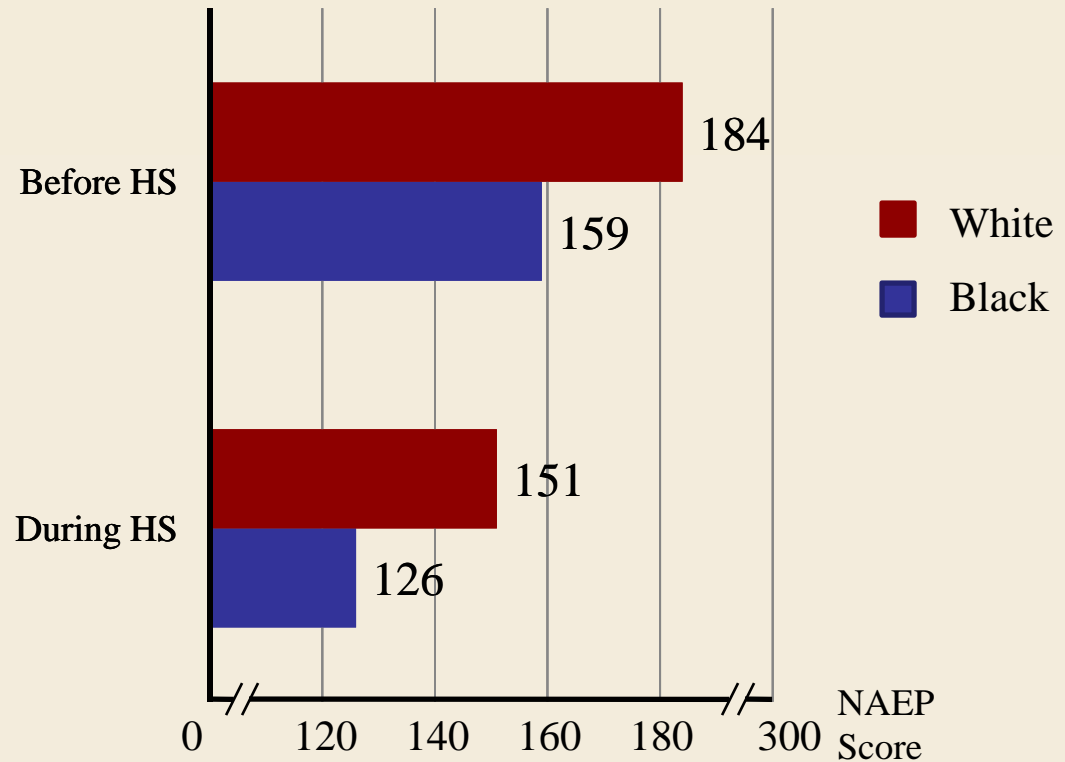


High school graduates according to when they took algebra I, by race: 2005

Percentage of Students

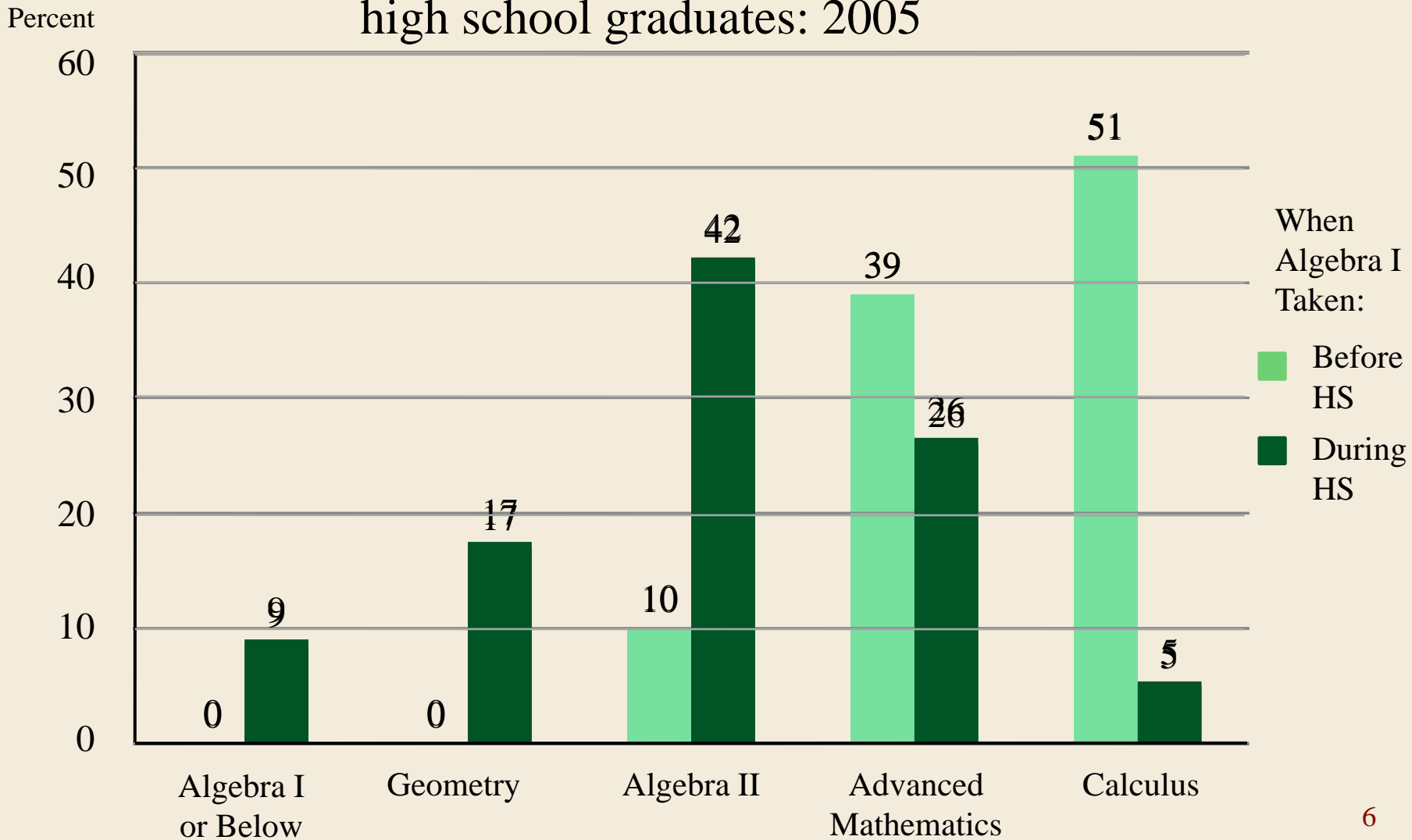


NAEP Mathematics Score



Timing of Algebra I

Highest mathematics course taken by high school graduates: 2005





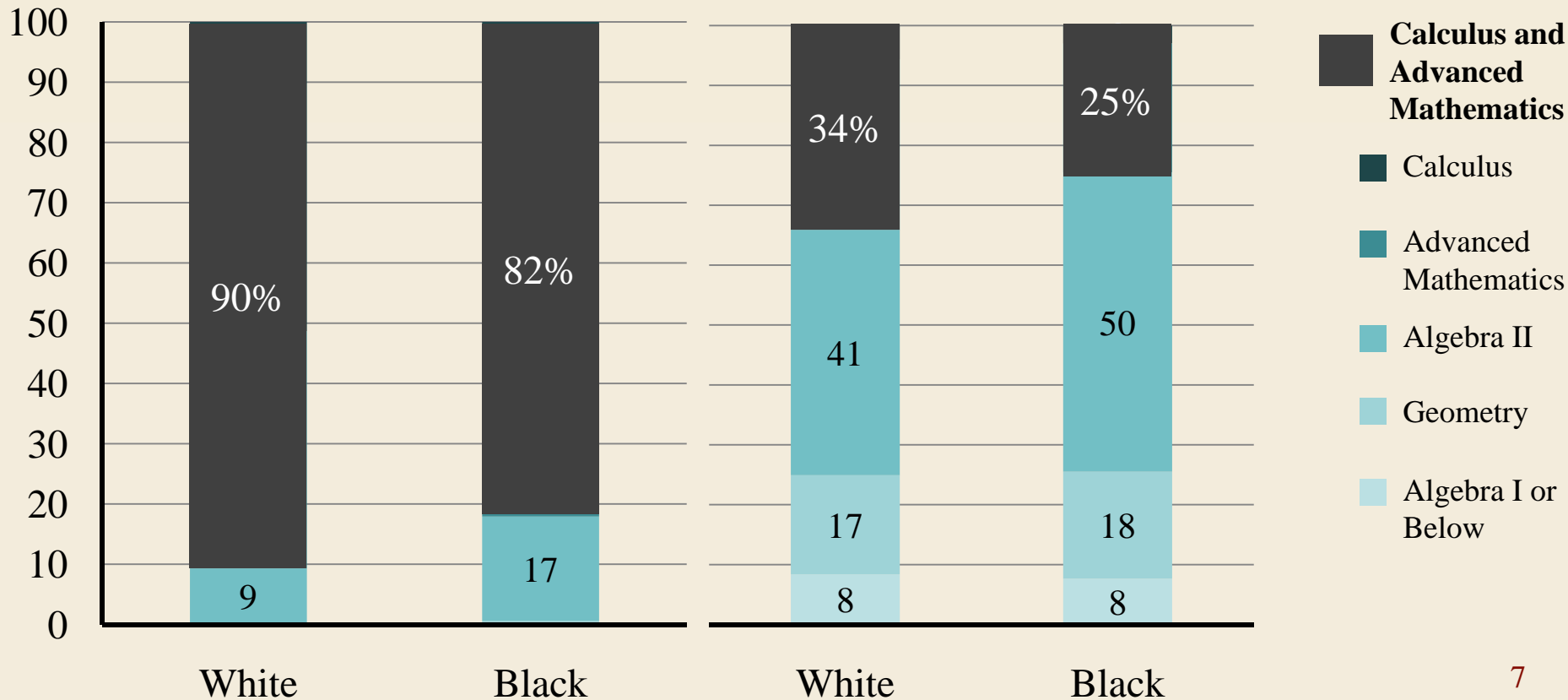
Timing of Algebra I

Highest mathematics course taken by high school graduates, by race: 2005

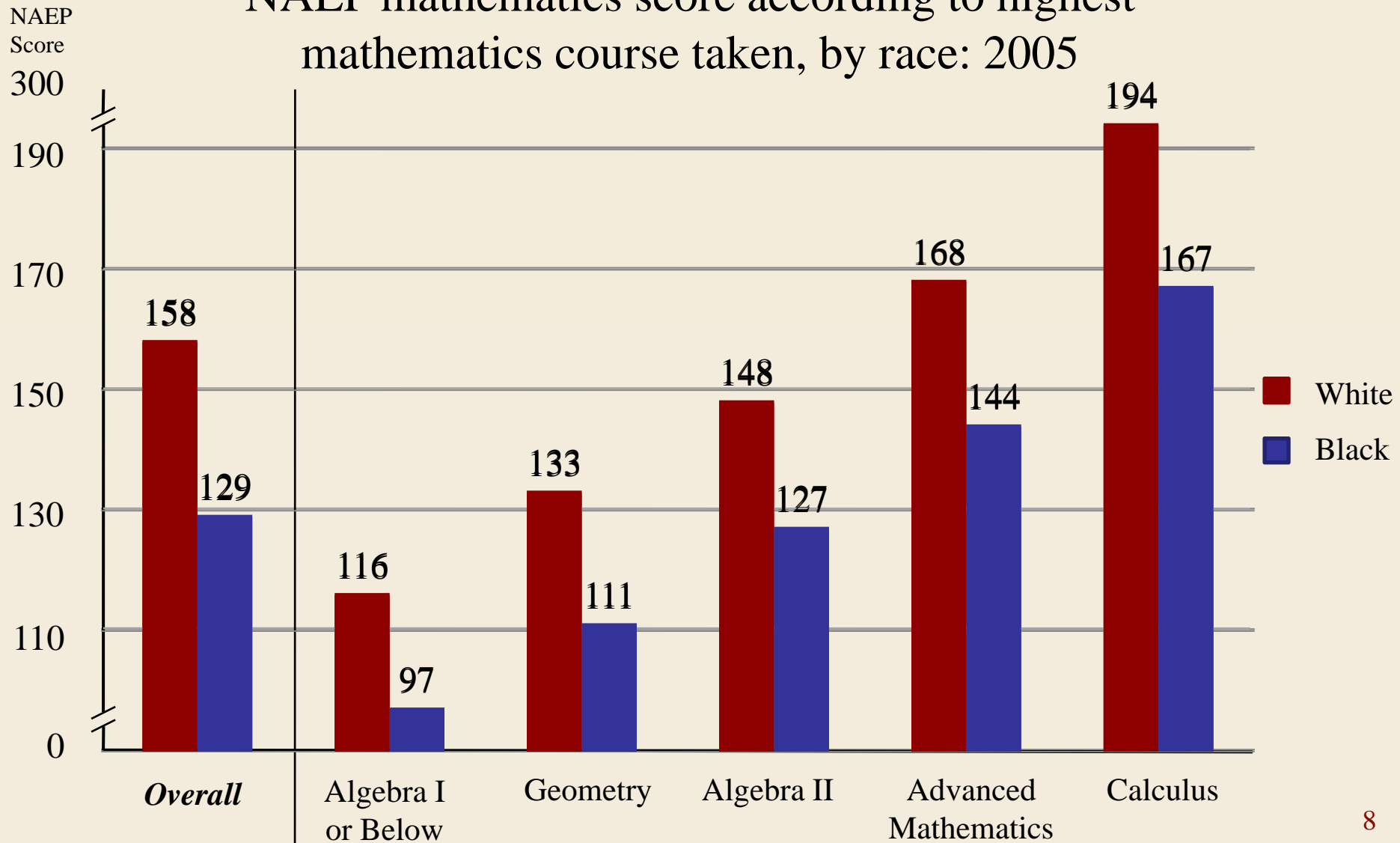
Algebra I Before High School

Algebra I During High School

Percent



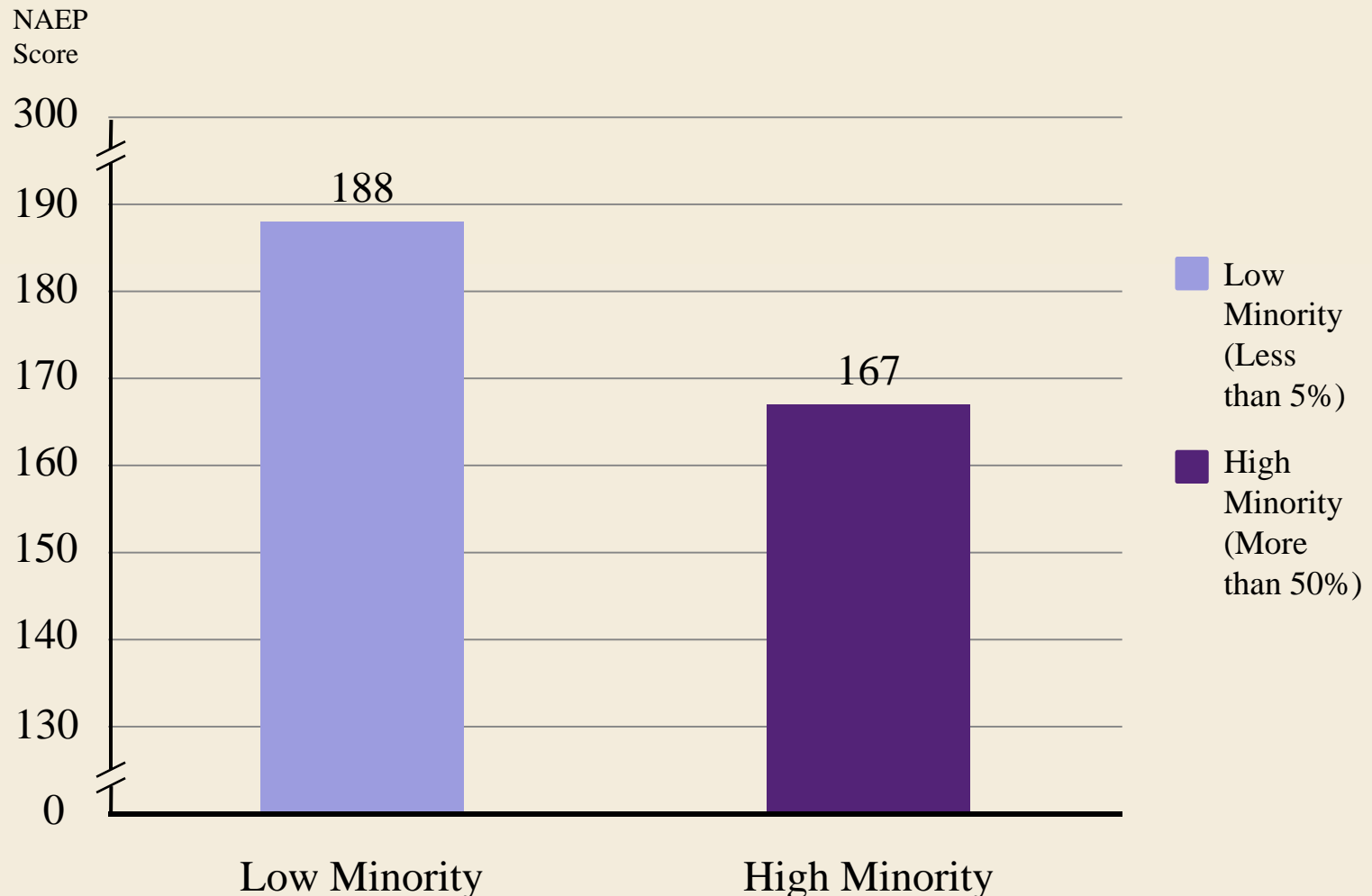
NAEP mathematics score according to highest mathematics course taken, by race: 2005



*OPRAH'S SPECIAL REPORT:
AMERICAN SCHOOLS IN CRISIS*

Two-part special aired on April 11-12, 2006

NAEP mathematics performance of students who earned an A in advanced mathematics or calculus: 2005



“I want to make sure that if a student takes a course, it’s really a significant course, not a watered-down version.”

- Ronald A. Pieffer

Maryland deputy state superintendant for academic policy

Purpose: Determine what students are being taught in algebra I and geometry courses.

Sample: In 2005, algebra I and geometry textbook information collected from a nationally representative sample of 650 high schools.



Approach: Obtain in-depth information about mathematics course content, including:

- Primary and supplementary textbooks used
- Chapters covered
- Additional course materials

Information for a given course reviewed to determine how much students would be likely to learn in that course.

2005 High School Transcript Study: Mathematics Course Content Analysis

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