

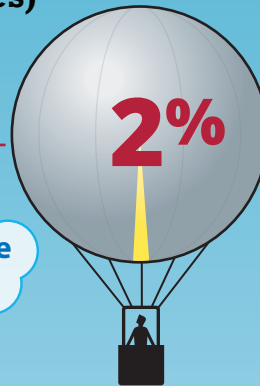
## Students Struggle to Reach the TIMSS Advanced International Benchmarks

TIMSS Advanced describes achievement at three International Benchmarks along the scale: Advanced, High, and Intermediate. There was a range of results across countries, but on average the majority of students found the TIMSS Advanced mathematics assessment very difficult.

### Percentage of Students Reaching Benchmarks (averaged across countries)

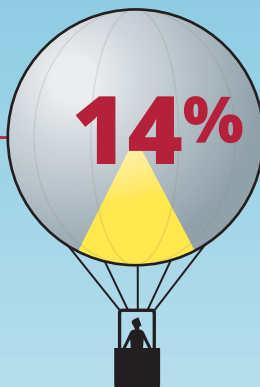
**Advanced Benchmark (625)**

In the Russian Federation, Lebanon, and the United States 7-10% reached the Advanced Benchmark, but only 1-3% did in the other countries.



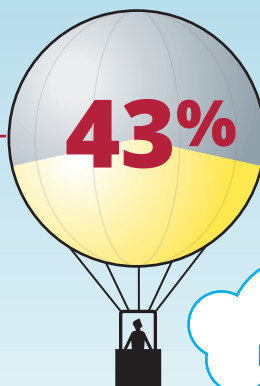
Students demonstrate thorough understanding of concepts, mastery of procedures, and mathematical reasoning skills. They can solve problems in complex contexts in algebra, calculus, geometry, and trigonometry.

**High Benchmark (550)**



Students can apply a broad range of mathematical concepts and procedures in algebra, calculus, geometry, and trigonometry to analyze and solve multi-step problems set in routine and non-routine contexts.

**Intermediate Benchmark (475)**



The surprisingly low percentages of students reaching the Intermediate Benchmark reflected substantial declines in 4 countries compared to 1995.

Students demonstrate basic knowledge of concepts and procedures in algebra, calculus, and geometry to solve routine problems.