

Exhibit 3.1: TIMSS Advanced 2015 Advanced Mathematics Populations

Country	Advanced Mathematics Population
France	Students in the 12 th grade in the scientific track
Italy	Students in the 13 th grade in general schools with scientific focus on mathematics and physics (Liceo Scientifico), in general schools with a focus on science, mathematics, and physics (Liceo Scientifico opzione Scienze Applicate), or in technical institutes and receiving full-time vocational training
Lebanon	Students in the 12 th grade in the general science program
Norway	Students in the 13 th grade who have taken the Mathematics R2 advanced mathematics course in the academic track
Portugal	Students in the 12 th grade in the Sciences and Technology or Socio-Economic programs of the academic track who have taken the Mathematica A advanced mathematics course
Russian Federation	Students in the 11 th grade who have taken 4.5 hours or more per week of instruction in mathematics (Profile and Intensive streams)
Russian Federation 6hr+	Students in the 11 th grade who have taken 6 hours or more per week of instruction in mathematics (Intensive stream)
Slovenia	Students in the 13 th grade in general gymnasias programs
Sweden	Students in the 12 th grade in the Natural Science or the Technology programs and have taken or were taking Mathematics 4 and/or Mathematics 5 course
United States	Students in the 12 th grade who have taken an advanced mathematics course (AP, IB, or another advanced mathematics course specific to their state/district), in Grade 12 or in a prior grade