

International Academy Math Placement Test Content

On the placement assessment, students are given an opportunity to demonstrate competence (without a calculator) of topics such as (but not limited to):

Section A: *(Familiar questions for all students)*

- Order of operations
- Operations with fractions
- Solving single variable equations

Section B: *(Somewhat familiar content for Math 8 / Mostly familiar for Algebra I +)*

- Order of operations
- Operations with fractions
- Ratios and percents
- Simplifying rational expressions
- Solving rational equations
- Simplifying radical expressions
- Polynomial expansion and combining like terms
- Solving single variable equations
- Solving linear equations
- Graphing linear equations
- Writing linear equations
 - Calculating slope
 - Demonstrating understanding of slope-intercept form
- Solving single variable inequalities and demonstrating solution on a number line
- Solving linear inequalities
- Graphing linear inequalities
- Solving linear systems of equations
- Solving linear systems of inequalities
- Geometry
 - Pythagorean theorem
 - Isosceles and equilateral triangles
 - Volume of cubes and rectangular prisms
 - Area of squares and rectangles
- Basic probability
- Mean, median and mode

Section C: *(Unfamiliar content for Math 8 / Somewhat familiar for Algebra I / Mostly familiar for Geometry +)*

- Solving quadratic equations using factoring and quadratic formula
- Solving more advanced rational equations
- Solving radical equations
- Graphing exponential expressions
- Distance and midpoint formula
- Equations of circles