

# Math Placement Test Information

To ensure proper placement of your daughter in her math course, Willows Academy requires a math placement exam for all enrolled students entering grades 6-9.

#### Date:

- Wednesday, April 30th, 4:00-5:00 pm (Middle School students) and 4:00-5:30 pm (High School students), and
- Makeup date: Wednesday, May 7th, 4:00-5:00 pm (Middle School students) and 4:00-5:30 pm (High School students),

#### What to bring:

- Two #2 pencils and an eraser
- Bring a calculator only if you plan on taking the Algebra I Proficiency Test Otherwise, no calculator is needed

#### **Results and Placement:**

- Our Heads of School and Math Department will carefully review your performance on the placement test and your previous math classes to determine the most suitable math course for you. • We will consult with you if we have any questions.
- We will typically communicate her math placement within two weeks of the exam.

If you have any further questions or need additional support, please don't hesitate to contact Dr. Jolene Birmingham at 847.824.6900 ext.226 (birmingham@willowsacademy.org).

## Frequently Asked Questions about Math Placement

#### Why does my daughter need to take a math placement test?

Performance on the math placement test enables Willows Academy to place your daughter in the math course sequence, where she will be challenged academically without being overwhelmed.

#### What placement test will my daughter take?

Your daughter's placement depends on what grade level she will enter this fall, her last completed math course, and her performance on the math placement test. Please see the topics below. In general, each placement test will cover a subset of the math knowledge we expect your daughter to have from her previous classes and test her readiness for specific math coursework in the fall. She must show all her work demonstrating her thinking and mathematical skills.

#### What does my daughter need to take the test?

Students need to bring two #2 pencils and an eraser. Only students taking the *Algebra I Proficiency* placement test must also bring a calculator.

#### Why can't my daughter use a calculator on certain tests?

The placement test measures your daughter's facility with essential mathematical skills required for the math courses offered at Willows Academy. For this reason, using a calculator will generally not help her, and we believe she will score better by knowing the material and working it out by hand.

#### Does my daughter need to study for the test?

We encourage your daughter to review, not necessarily study, for the placement test. We have scheduled these placement tests for the end of the current school year so that the topics are still fresh in her mind. The math topics assessed are listed below.

#### When can my daughter take the test?

We will administer a math placement test to all new Willows Academy students on Wednesday, April 30th, 4:00-5:00 pm (Middle School students) and 4:00-5:30 pm (High School students), and Makeup date: Wednesday, May 7th, 4:00-5:00 pm (Middle School students) and 4:00-5:30 pm (High School students). Students should attend <u>one</u> of the two testing sessions. We administer these tests as close as possible to the end of the school year, thus providing the most accurate assessment of your daughter's math abilities.

#### How long is the test?

Students desiring to test out of Algebra I must complete the *Algebra I Proficiency* test in ninety (90) minutes or less. The *Algebra I Readiness* and *Middle School Math* placement tests must be completed in fifty (50) minutes or less.

## Can my daughter take a placement test meant for a higher-level math course so she can be placed into that math course?

A current student must take the placement test corresponding to the course(s) for her grade level. If she performs exceptionally well on the placement test, the Mathematics Department may permit her to take a placement test generally given to the next grade level. Because the placement tests only cover a subset of the math knowledge covered in our math courses, the student's math placement is not definitive. The school will evaluate her performance during the first quarter to determine if it is in the student's best interest to continue with the current math course.

# Math Placement Test Topics

### Middle School Math:

(Rising 6<sup>th</sup> grade, testing into Math Foundations)

- 1. Basic operations with whole numbers and decimals
- 2. Order of operations with numbers
- 3. Translation of words to mathematical expressions
- 4. Solving one- and two-step equations
- 5. Comparison of values of decimals and fractions
- 6. Operations with fractions
- 7. Simple understanding of tables, patterns, ratios, proportions and graphs
- 8. Calculation of properties of basic geometrical figures (triangles and quadrilaterals)

## **Algebra I Readiness:**

### (Rising 7<sup>th</sup>/8<sup>th</sup>/9<sup>th</sup> grade, testing into Algebra I)

- 1. Basic operations with real numbers and algebraic expressions (with variables)
- 2. Order of operations with numbers and algebraic expressions
- 3. Translation of words to mathematical expressions to solve word problems
- 4. Solving one- and two-step basic linear equations and inequalities
- 5. Comparison of values of decimals and fractions
- 6. Operations with fractions
- 7. Understanding of tables, patterns, ratios, proportions, and graphs
- 8. Calculation of properties of geometrical figures (circles, triangles and quadrilaterals)

## **Algebra | Proficiency:**

### (Rising 8<sup>th</sup>/9<sup>th</sup> grade, testing out of Algebra I)

- 1. Order of operations with numbers and algebraic expressions
- 2. Translation of words to mathematical expressions
- 3. Solving one- and two-step linear equations, quadratic equations, and inequalities
- 4. Solving systems of linear equations
- 5. Graphing linear and non-linear functions
- 6. Simplifying/solving exponential expressions/equations
- 7. Factoring polynomials
- 8. Simplifying/solving rational expressions/equations
- 9. Inequalities with absolute values
- 10. Simplifying radical expressions
- 11. Solving quadratic equations and functions