

# Integrated Math A Readiness

## Course Preparedness Profile & Expectations

This course is designed for students who have had exposure to, but have yet to develop an understanding of all 6<sup>th</sup> grade standards.

Below are some guidelines for choosing the best course for an individual student. This is *not* a placement test and it should *not* be used as the only criteria for making placement decisions.

### Student Background

Students entering **Integrated Math A Readiness** should *already* have a good understanding of the following concepts:

- Write and interpret numerical expressions
- Analyze patterns and relationships
- Understand the place value system
- Perform operations with multi-digit whole numbers and with decimals to hundredths.
- Use equivalent fractions as a strategy to add and subtract fractions
- Understand multiplication and division of fractions
- Convert like measurement units within a given measurement system
- Represent and interpret data.
- Understand concepts of volume and relate volume to multiplication and addition.
- Select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume.
- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

Students entering **Integrated Math A Readiness** should also be able to solve problems such as

<p><u>Operations with Decimals Problem</u></p> <p>Connor is buying tickets to a play. The play he and his friends want to see costs \$4.75 per ticket. Connor has \$26.00 in his pocket. What is the greatest number of tickets Connor can buy?</p>	<p><u>Coordinate Geometry Problem</u></p> <p>What are the coordinates of points A, B, and C?</p>
<p><u>Operations with Fractions Problem</u></p> <p>A baker used 12 cups of batter to make muffins. It took <math>\frac{2}{3}</math> cup of batter to make 1 muffin. How many muffins did the baker make?</p>	<p><u>Geometry Problem</u></p> <p>James folds a square piece of paper in half to create a rectangle with a perimeter of 12 inches. How long is each side of the original square piece of paper?</p>
<p><u>Volume Problem</u></p> <p>Tanya fills the tank shown with 1050 cubic inches of dirt. What is the height of the dirt in the tank?</p> <p>21 in 18 16 14 12 10 8 6 4 2 0 30 in 7 in</p>	<p><u>Numerical Expression Problem</u></p> <p>A. Tyler is 8 years old. His sister Olivia is 4 years less than twice his age. Write a numerical expression for Olivia's age.</p>

## **Course Content and Expectations**

In **Integrated Math A Readiness**, students will learn concepts such as:

- Connecting ratio and rate to whole number multiplication and division
- Using concepts of ratio and rate to solve problems
- Operations with positive and negative rational numbers
- Writing and interpreting and using expressions, equations, and inequalities
- Statistical thinking representing and analyzing quantitative relationships between dependent and independent
- Developing an understanding of statistical variability.
- Describing distributions
- Finding common factors and multiples
- Solve real-world problems involving area, surface area, and volume.
- Analyzing proportional relationships
- Drawing, constructing and describing geometrical figures
- Find angle measure.
- Evaluating probability models.

As in all math courses offered at SDUHSD, students are aware of and make use of all **Standards for Mathematical Practices**:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

This course is a below grade level course which will have an individualized remediation component. Throughout the course, students will be expected to work collaboratively while problem solving and working on open ended problems.