

## Topics Assessed on the Test for Placement into Integrated Math 3

Students will be asked to demonstrate that they are able...

- To write algebraic expressions.
- To simplify expressions involving exponents.
- To use the order of operations to evaluate expressions.
- To classify, graph, and compare real numbers.
- To find and estimate square roots.
- To operate on integers.
- To use the Distributive Property to simplify expressions.
- To solve equations in one variable.
- To solve equations and inequalities involving absolute values.
- To rewrite and use literal equations and formulas.
- To solve and apply proportions.
- To solve percent problems using proportions.
- To solve percent problems using percent equation.
- To write, graph, and identify solutions of inequalities.
- To solve inequalities.
- To determine whether a relationship is a function.
- To find domain and range and use function notation.
- To transform functions, using rigid transformations.
- To find slope.
- To write linear equations.
- To graph linear equations in two variables.
- To use linear inequalities when modeling real-world situations.
- To determine whether lines are parallel, perpendicular, or neither.
- To write equations of parallel lines and perpendicular lines.
- To solve systems of equations by graphing.
- To solve systems of equations.
- To solve systems of linear inequalities by graphing.
- To solve quadratics.

- To graph quadratic functions.
- To simplify complex numbers.
- To operate on complex numbers.
- To simplify expressions involving zero and negative exponents.
- To multiply powers with the same base.
- To raise a power to a power.
- To raise a product to a power.
- To divide powers with the same base.
- To raise a quotient to a power.
- To solve radical equations.
- To graph exponential functions.
- To measure and classify angles.
- To apply the triangle sum theorem.
- To apply the line segment theorem.
- To use definition of complementary and supplementary angles.
- To classify triangles.
- To solve triangles.
- To define key terms in Geometry.
- To identify angle relationships with parallel lines cut by a transversal.
- To prove congruency.
- To prove similarity.
- To solve for missing sides or angles using congruency and similarity.
- To use the angle sum theorem.
- To calculate area and perimeter.
- To apply theorems regarding arcs and segments within circles.
- To calculate probability.
- To summarize data.

## The following topics should also be mastered prior to beginning Integrated Math 3 but are not assessed on this test:

Students will be expected to be able...

- To use trigonometry to solve for missing sides and angles of right triangles.
- To prove the Pythagorean Theorem.
- To apply the Pythagorean Theorem.
- To calculate Surface Area and Volume.