St. Francis Catholic High School

Topics assessed on the Challenge Test for placement into Integrated Math 2

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

- Write algebraic expressions.
- Simplify expressions involving exponents.
- Use the order of operations to evaluate expressions.
- Classify, graph, and compare real numbers.
- Find and estimate square roots.
- Operate on integers.
- Use the Distributive Property to simplify expressions.
- Solve equations in one variable.
- Solve equations and inequalities involving absolute values.
- Rewrite and use literal equations and formulas.
- Solve and apply proportions.
- Solve percent problems using proportions.
- Solve percent problems using percent equation.
- Write, graph, and identify solutions of inequalities.
- Solve inequalities.
- Determine whether a relationship is a function.
- Find domain and range and use function notation.
- Transform functions, using rigid transformations.
- Find slope.
- Write linear equations.
- Graph linear equations in two variables.
- Use linear inequalities when modeling real-world situations.
- Determine whether lines are parallel, perpendicular, or neither.
- Write equations of parallel lines and perpendicular lines.
- Solve systems of equations by graphing.
- Solve systems of equations.
- Solve systems of linear inequalities by graphing.
- Simplify expressions involving zero and negative exponents.
- Multiply powers with the same base.
- Raise a power to a power.
- Raise a product to a power.

- Divide powers with the same base.
- Raise a quotient to a power.
- Graph exponential functions.
- Measure and classify angles.
- Apply the triangle sum theorem.
- Apply the line segment theorem.
- Use definition of complementary and supplementary angles.
- Classify triangles.
- Solve triangles.
- Define key terms in Geometry.
- Identify angle relationships with parallel lines cut by a transversal.

The following topics should also be mastered prior to beginning Integrated Math 2 but are not assessed on this test.

Students will be expected to be able to:

- Summarize data.
- Model data.
- Prove congruency.
- Use constructions for a physical proof.