

## MB2 Advanced Learning Objectives

- Students will be able to create and interpret Venn Diagrams and use them to solve problems.
- Students will be able to solve systems of equations with 2 unknown variables.
- Students will be able to solve word problems by setting up and solving systems of equations.
- Students will be able to complex solve inequalities.
- Students will learn what a composite function is and how to interpret and evaluate composite functions.
- Students will be able to distinguish an arithmetic series from a geometric series and will learn to find patterns that can be used to solve them.
- Students will learn the Pythagorean Theorem, understand Pythagorean triples, and special right triangles.
- Students will be able to understand polynomials and solve problems containing operations with polynomials.
- Students will be able to understand and solve problems involving compound interest.
- Students will understand coordinate geometry and its applications in math.
- Students will be able to solve problems involving the area of circles and sectors of circles.
- Students will be able to use permutations and combinations to solve problems involving counting possibilities.
- Students will learn the rules of probability and be able to solve intermediate probability problems.