Over the centuries, mathematics has played an important role in almost every aspect of human development, and in many cases has changed the course of history. Mathematical problem solving intrinsically requires finding patterns, building models, and creative thinking. However, to most of our students, mathematics just means crunching numbers and following rules. In this presentation, we will discuss a general education mathematics course that seeks to foster inquiry and creative problem solving in our students. In this course, with less focus on algebra and more on discovery, we pose classical problems, and then discuss the intriguing and ground breaking mathematical concepts that help solve those problems. In a culminating final project, the students research a topic of their choice, and create their own magazine article and oral presentation to share an important aspect of mathematics. We will share student comments and feedback to show that this approach leads to a more rewarding student experience, and a shift in student mindsets. (Received September 16, 2019)