Mathematics anxiety is an issue associated with the development of mathematical skills in students. In this analysis, the authors examine literature on the background of math anxiety, the relationship between math anxiety and achievement, and proposed solutions for intervention to decrease math anxiety. We have designed a study that measures the effects of the pedagogical approach in a college level course, "The Whole Truth About Whole Numbers." Through the course at Saint Joseph’s University, we observe the presence of mathematics anxiety, the attitudinal change of anxiety over the course of the semester, and the content knowledge change through a pretest/posttest design. Also, based on the recommendations found in the literature search on intervention, we created games that have been implemented into this course. (Received September 25, 2012)