Research shows that use of online tools plays important roles in students’ overall performance in their math courses. Our study focuses on the relationship between students’ grades in the online assignments and their grades in the corresponding in-class quiz and tests in undergraduate mathematics courses. In this observational study, data was collected from multiple face-to-face undergraduate math courses which integrated online learning management system. We will present some findings of our study on the relationship of students’ online engagement level and their performance during the in-class tests and quizzes. (Received January 26, 2019)