A Number Talk is a short class discussion around a particular problem that is designed to elicit invented algorithms, improve mathematical communication and develop numeracy and mathematical creativity (see Humphreys and Parker 2015). This instructional tool has become an important part of many school math classrooms. In this talk, we will engage in a Number Talk, and we will discuss how to use this tool in courses for pre-service middle and high school teachers to strengthen their mathematical knowledge for teaching. (Received September 18, 2017)