Visual representations of mathematical notions are prevalent in geometry written and enacted curriculum and has been an integral part of the process of learning geometry. The representations help to make connections between concrete and abstract ideas and often guide our intuition in solving a given problem. In this talk we describe misconceptions pre-service middle school mathematics teachers exhibited when analyzing the relations between altitude, median and angle bisector in a triangle. Subsequently, we will provide instructional recommendations that can address misconceptions identified, and reflect on other incorrect interpretations of images when teaching geometry. (Received August 31, 2015)

