

# Minnesota Writing Project

## ---Demonstration Lesson---

**Title of lesson:** I can use the segment addition postulate and congruent segments to write and solve equations.

**Suggested grade/age:** 10<sup>th</sup> Grade

**Approximate time needed to complete lesson:** one hour

### **Learning objective(s) and significance of lesson**

A lot of high school geometry is using postulates and theorems regarding circles, polygons, and geometric figures to write and solve equations.

### **Brief summary/outline of lesson**

First begin with a very basic problem where they identify the length of the missing section of the line segment, then connect that example with the Addition Segment Postulate. More variables and word problems will be introduced as examples become more challenging.

Then introduce congruent segments and their notation. Have more examples with writing and solving equations with congruent segments.

Then have an activity where examples will be posted around the room. Groups were randomly created in Excel.

This would be the third lesson of the school year. This lesson scaffolds students in reading more complex postulates and theorems and using them to write and solve equations, which is most Geometry.

### **Related Resources**

I recommend opening the classroom notes in Notability on an iPad and use color coding to distinguish essential.

### **Possible extensions or adaptations for different purposes/student needs**

If possible, post classroom notes online for students to have access to outside of the classroom.

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