

## Geometry #6

This week we will have an introduction to the software POV-Ray, and we will also examine some mathematics associated with coordinates.

### Before Thursday, September 27

1. Read the introduction to POV-Ray, download and run it, and make an at least one interesting image to post to the Forum called “POV-Ray”. Please post both the source files and the resulting images.
2. Read pages 44–51 of “Notes on Geometry”, [www.ms.uky.edu/~lee/ma501fa07/notes.pdf](http://www.ms.uky.edu/~lee/ma501fa07/notes.pdf).
3. Read Section 2.10, pages 23–27, and Section 3.7, pages 51–54, of “Geometry for Middle School Teachers: Companion Problems for the Connected Mathematics Curriculum”, [www.ms.uky.edu/~lee/ma241/ma241notesb.pdf](http://www.ms.uky.edu/~lee/ma241/ma241notesb.pdf). Begin working on the homework problems, but also take note of any material you feel less familiar with.

### Thursday, September 27, 7–9 pm

Attend the Adobe Connect session to discuss POV-Ray, the readings, and comments and questions on the assigned homework due on Sunday.

### Before Sunday, September 30, 11 pm

Homework problems due Sunday, September 30, 11 pm, uploaded to the Moodle site as a single file less than 2 MB, or else emailed to the address [lee@ms.uky.edu](mailto:lee@ms.uky.edu). Please use Word or pdf files only.

1. Notes on Geometry, Exercise 7.1.3.
2. Notes on Geometry, Exercise 7.1.7. (Do Exercise 7.1.8 on your own.)
3. Notes on Geometry, Exercise 7.1.9. (Do Exercises 7.1.10 and 7.1.11 on your own.)
4. Notes on Geometry, Exercise 7.1.12.
5. Geometry for Middle School Teachers, Exercise 3.54.
6. Geometry for Middle School Teachers, Exercise 3.55.
7. Geometry for Middle School Teachers, Exercise 3.56.

8. Geometry for Middle School Teachers, Exercise 3.60.
9. Geometry for Middle School Teachers, Exercise 3.61.