

Due April 6

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Name

Be sure to follow the “Writing Guidelines” handout when presenting your solutions.

**NOTE:** For this homework set you are allowed to work with other members of either of the geometry classes. However, you must cite everyone with whom you have discussed your problem.

*“Pure mathematics consists entirely of such assertions as that, if such and such a proposition is true of anything, then such and such another proposition is true of that thing. It is essential not to discuss whether the first proposition is really true, and not to mention what the anything of which it is supposed to be true . . . . If our hypothesis is about anything and not about some one or more particular things, then our deductions constitute mathematics. Thus mathematics may be defined as the subject in which we never know what we are talking about, nor whether what we are saying is true.”* – Bertrand Russell

### Problems

Understand the major steps in each of the following: Propositions 4.7, 4.8, 4.9, 4.10, Exercises 17, 19, 22, 23, 24, 25  
Know the answers to the Chapter 4 Review Exercises on pages 191-192.

- (**Gerardo, Brianna**) Prove Propositions 4.7 and Exercise 25. In addition, do any one of exercises 17, 19, 22, 24.
- (**Ann, Janet**) Prove Propositions 4.8 and Exercise 25. In addition, do any one of exercises 17, 19, 22, 24.
- (**Justin, Yujung, Nancy**) Prove Propositions 4.9 and Exercise 25. In addition, do any one of exercises 17, 19, 22, 24.
- (**Sean, Megan**) Prove Proposition 4.10 and Exercise 25. In addition, do any one of exercises 17, 19, 22, 24.