

Geometry Final

Sarah Wright

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Introduction

If you did an oral portion of this final exam, include a brief summary here. Be sure to include if you successfully completed any of the problems. If you did complete portions, you can delete those sections below.

Below should be a formal write-up of final draft quality; follow the same Writing Style Guide as we use for papers. You only need to complete this for problems that you did not complete during your oral exam.

Regular Octagon Construction

Include three things here:

- The steps for your construction of a regular octagon and pictures of (at least most of) those steps.
- A proof that what you have constructed is a regular octagon.
- A brief summary of how general your construction is.

These do not need to be organized in this exact way; you can mush some things together. As long as I can find all the parts, you're good to go.

Task Involving “Content”

This section will look different depending on which task from Chapter 11 you choose to complete, but in general you should follow the guidelines for regular papers. Include a brief intro, an appropriate statement of the result or task, and the supporting evidence.

Paper Folding

For this portion, you should be writing for an audience that is unfamiliar with this question. Explain the folding required and any special cases you noticed where the folding directions

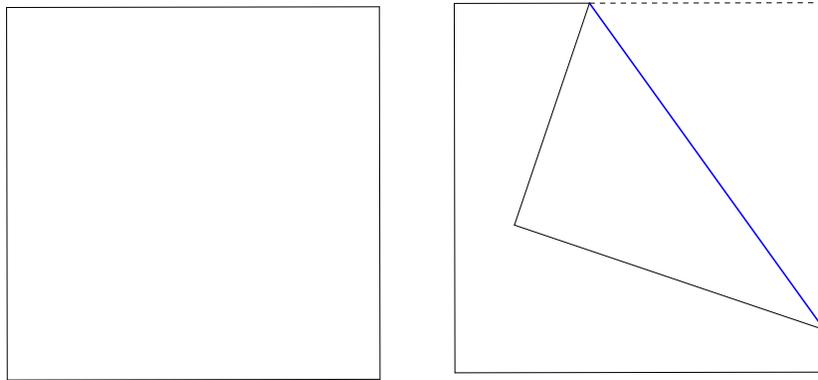
should be different. Some results are difficult to state formally. Include those types of things that you noticed in this narrative portion.

In a second part, include formal statements of any conjectures you have. You should aim to move as many statements from the informal section above to this part as you can.

In the third section, include the proof of one of your conjectures. Again, the more you have, the better, but definitely prove something.

In a final section, include any related ideas you could explore. You don't have to actually do any of this nor make any formal or informal conjectures. These statements could very likely start with the phrase, "I wonder what would happen if ..."

Start with a square piece of paper. Make a single fold in the paper. Any fold you wish.



This splits the four edges of the square into six segments. Fold each of these pieces to meet the main blue fold:

