

## Figure 4.10 Geometry Similar Figures Menu

**Menu:** Similar Figures

**Final Due Date:** April 17

**Check In Dates:** Meet with Teacher to determine

### **Imperatives (Most Complete All)**

1. Write a mathematical definition of “Similar Figures.” It must include all pertinent vocabulary, address all concepts and be written so that a fifth grade student would be able to understand it. Diagrams can be used to illustrate your definition.
2. Generate a list of applications for similar figures, and similarity in general. Be sure to think beyond “find a missing side...”
3. Develop a similar figures lesson to teach younger students who are just beginning to think about similarity.

### **Negotiables (Choose 2)**

1. Create a book of similar figure applications and problems. This must include at least 8 problems. They can be problems you have made up or found in books, but at least 3 must be application problems. Solve each of the problems and include an explanation as to why your solution is correct.
2. Show at least 5 different applications of similar figures in the real world, and make them into mathematical problems. Solve each of the problems and explain the role of similarity. Justify why the solutions are correct.
3. Create an art piece using similar figures. On the back, explain the mathematics of your work including which shapes are similar, the transformations used to create the images from the original, and any other interesting mathematics you ran into during your

creation.

4. Write a FAQ sheet on similar figures. Please write a minimum of five questions and answers. It needs to incorporate correct vocabulary, steps needed and the possible issues in solving problems correctly, and why we need to learn about similarity.

**Optional (To go above and beyond)**

1. Make a photo album showing the use of similar figures in the world around us. Use captions to explain the similarity in each picture.
2. Write a story about similar figures in a world without similarity.
3. Write a song about the beauty and mathematics of similar figures.
4. Create a “how-to” or book about finding and creating similar figures.