

Similar Figures Project

You are going to create similar figures and show how they are similar by calculating their angles and side lengths. Here is what you are going to do:

1. Create 2 sets of similar figures. You may make 3-, 4-, 5- or 6-sided figures, but you may not make right triangles, rectangles or squares. You must create different type figures for each set. For example, if you create two similar triangles for one set, your other set must be either 4- or 5-sided. You cannot create four triangles.

2. You will use a ruler and a pencil to create your figures. Each figure must be cut out from construction paper, with each set being a different color. The figures will be pasted on white poster board.

3. You will clearly mark the lengths of each side of you figures. On a separate piece of white construction paper, you will show how your figures are similar using equations and proportions. Be sure to use proper signs and symbols when showing similarity and congruency.

4. After you have created your figures and written the proper proportions, you will need to find the lengths of a third figure. For example, if one of the triangles you create has sides that measure 8 inches and 5 inches, if you created another triangle with a measure of 11 inches what would the measure of a second side be? You will not have to create this third figure, but you will have to solve for the missing side.

What you will be graded on:

- Creating 2 sets of similar figures.
- Figures are carefully measured and cut out from construction paper.
- Side lengths and angles are neatly and clearly marked on all figures.
- Similarity proportions/equations are written and solved completely on a separate piece of paper.
- Correct symbols and signs are used to show similarity and congruency.
- Equation is correctly written and solved for a third figure.
- Hand writing is neat and legible, figures are neat, and figures and solutions are pasted to the poster board neatly.