

# Honors Geometry



## Similarity

### Honors Geometry Curriculum

#### Power Objective

**P.O. #7: Analyze ratio/proportion relationship and similar figures. (P.O. #7 Proficiency Rubric)**

#### Academic Vocabulary

- |   |   |
|---|---|
| <input type="checkbox"/> extremes of a proportion | <input type="checkbox"/> ratio            |
| <input type="checkbox"/> geometric mean           | <input type="checkbox"/> scale drawing    |
| <input type="checkbox"/> indirect measurement     | <input type="checkbox"/> scale factor     |
| <input type="checkbox"/> means of a proportion    | <input type="checkbox"/> similar          |
| <input type="checkbox"/> proportion               | <input type="checkbox"/> similar polygons |

#### Enduring Understandings

*Students understand that...*

- Two geometric figures are similar when corresponding lengths are proportional and corresponding angles are congruent.
- Definitions establish meanings and remove possible misunderstanding. Other truths are more complex and difficult to see. It is often possible to verify complex truths by reasoning from simpler ones by using deductive reasoning.
- Visualization can help you see the relationships between two figures and help you connect the properties of real objects with two-dimensional drawings of these objects.

#### Essential Questions

- How do you use proportions to find side lengths in similar polygons?
- How do you show two triangles are similar?
- How do you identify corresponding parts of similar triangles?