# **NOTES 8.2: INDIRECT MEASUREMENT**

Objective:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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***SIMILAR POLYGONS***:

Polygons that have the same shape but different size.

Similar triangles can be used in ***INDIRECT MEASUREMENT***.

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| **EXAMPLE 1: Find the value of ‘’.** |
| **EXAMPLE 2: Find the value of ‘’.** |
| **EXAMPLE 3: Solve for ‘’.** |
| **EXAMPLE 4: When Stephanie stands from a lamp post,**  **her shadow is long. If Stephanie is**  **tall, how tall is the lamp post?** |
| **EXAMPLE 5: Charlie walks away from a tree along its shadow**  **until his head is in line with the top of the tree’s**  **shadow. Charlie is standing from the**  **base of the tree and from the end of the**  **shadow. Charlie is tall. What is the height of**  **the tree?** |
| **EXAMPLE 6: A mirror is on the ground from Ricky and**  **from a flag pole. Ricky can see the top of the pole**  **in the mirror. If Ricky is tall, how tall is the flag**  **pole?** |