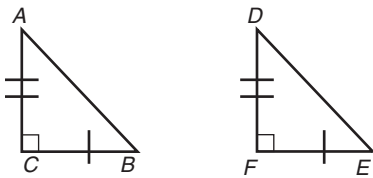


Name \_\_\_\_\_ Date \_\_\_\_\_

## Glass Lanterns Introduction to Congruence

### Vocabulary

Identify all parts of the figure that are described by the given term.

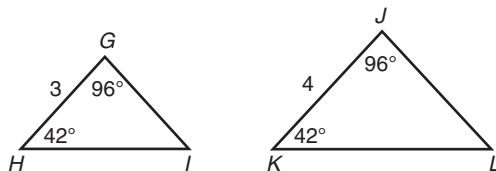


1. corresponding angles
  
2. corresponding sides
  
3. congruent figures

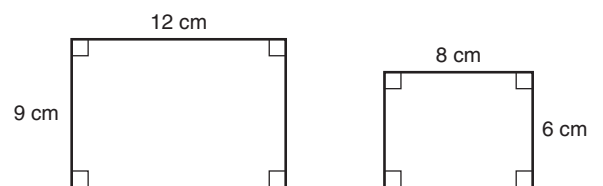
### Problem Set

List all of the terms that apply to each pair of polygons: similar, congruent, or neither.

4.

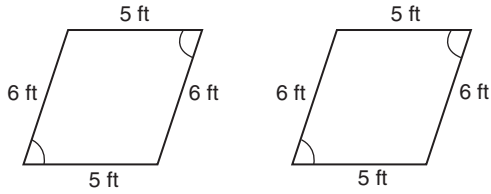


5.

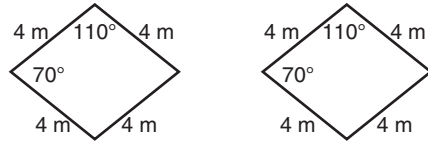


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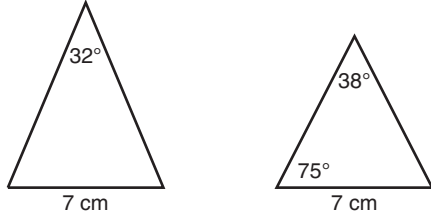
6.



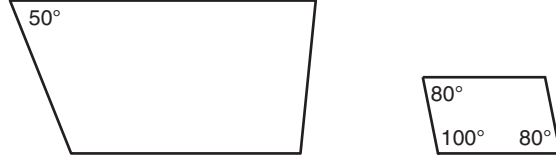
7.



8.



9.

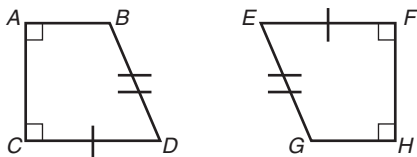


**Determine whether each pair of shapes is best described as similar or congruent.**

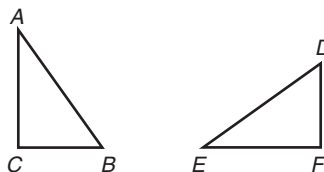
10. Figures  $ABC$  and  $DEF$  are both equilateral triangles. The ratio of the lengths of the corresponding sides is 1 : 1.
11. Figures  $GHI$  and  $JKL$  are both equilateral triangles. The ratio of the lengths of the corresponding sides is 1 : 4.
12. Figures  $ABCD$  and  $EFGH$  are both squares. The ratio of the lengths of the corresponding sides is 2 : 1.
13. Figures  $IJKL$  and  $MNOP$  are both squares. The ratio of the lengths of the corresponding sides is 1 : 1.

**Identify the corresponding angles of the congruent polygons.**

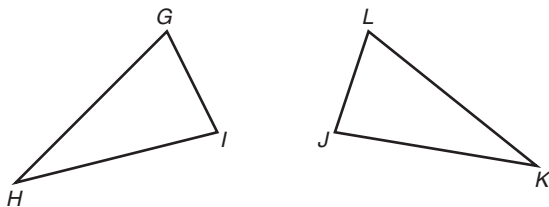
14.  $ABDC \cong HGEF$



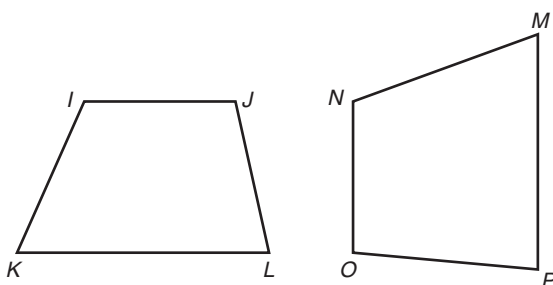
15.  $\triangle ABC \cong \triangle EDF$



16.  $\triangle GHI \cong \triangle LKJ$



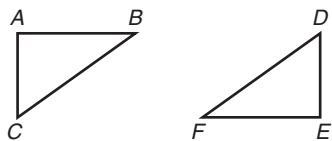
17.  $IJKL \cong NOPM$



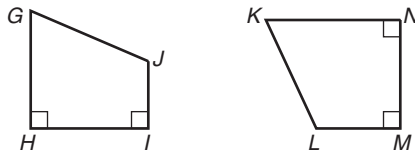
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**Identify the corresponding sides of the congruent polygons.**

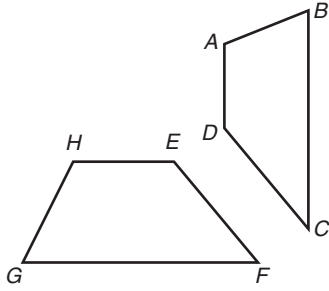
18.  $\triangle ABC \cong \triangle EFD$



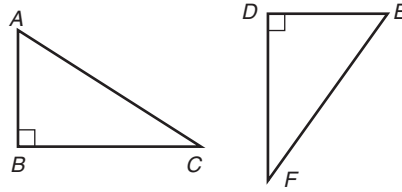
19.  $GHIJ \cong KNML$



20.  $ABCD \cong HGFE$

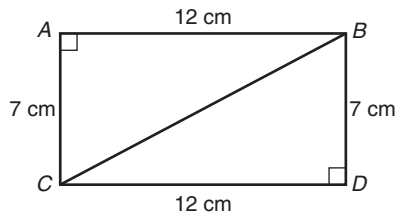


21.  $\triangle ABC \cong \triangle EDF$

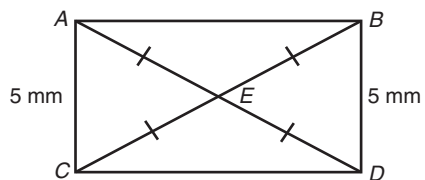


Determine whether the given polygons are congruent. Explain your answer.

22. triangles  $ABC$  and  $DCB$



23. triangles  $ACE$  and  $BDE$



24. triangles  $ABC$  and  $DEC$

