

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

## Framing a Picture Similar and Congruent Polygons

### Vocabulary

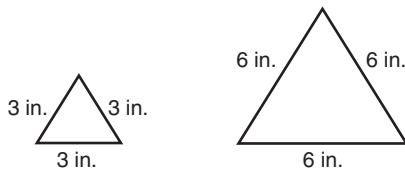
Write the term that best completes each statement.

1. Two figures are \_\_\_\_\_ if they have the same size and the same shape.
2. A(n) \_\_\_\_\_ is a ratio that represents the relationship between the measurements of a scale drawing or scale model and the actual measurements of an object.
3. A(n) \_\_\_\_\_ is a three-dimensional drawing that is similar to the actual object that it represents. A scale model is drawn with measurements that are proportional to the measurements of the actual object.
4. Two figures are \_\_\_\_\_ if they have the same shape but not necessarily the same size.

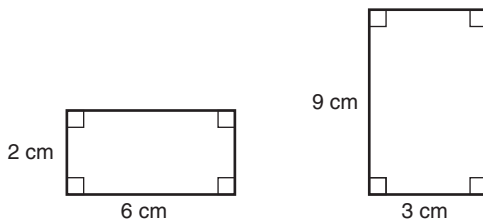
### Problem Set

Determine whether the figures are similar, congruent, or neither. Explain your answer.

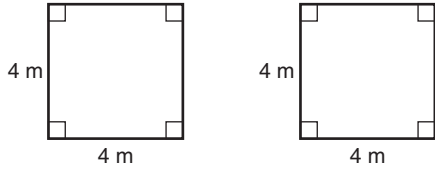
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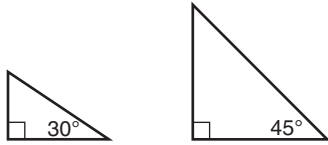
6.



7.

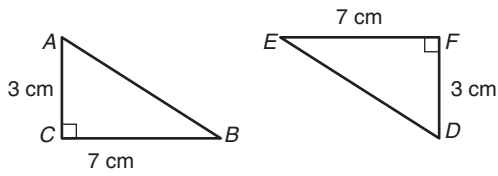


8.

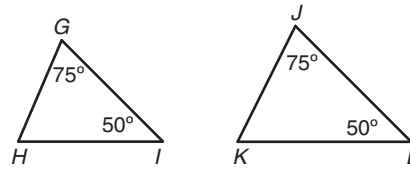


Given each pair of similar figures, identify all pairs of corresponding sides.

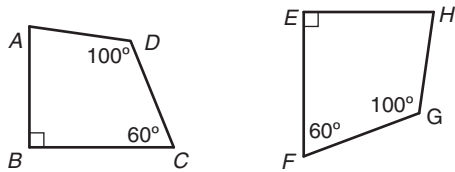
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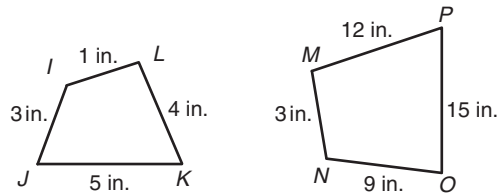
10.



11.

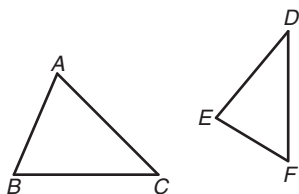


12.

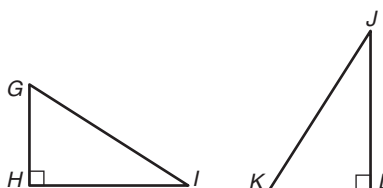


Given each pair of similar figures, identify each pair of corresponding angles.

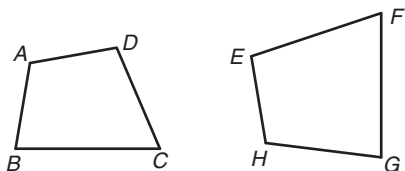
13.  $\triangle ABC \sim \triangle EFD$



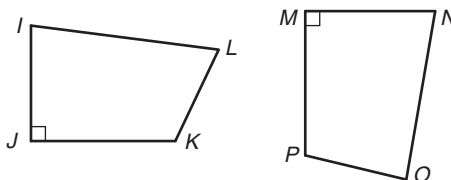
14.  $\triangle GHI \sim \triangle KLJ$



15.  $ABCD \sim HGFE$

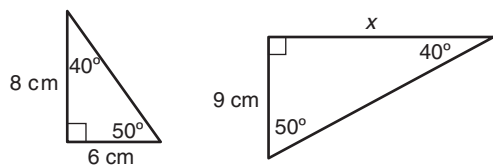


16.  $IJKL \sim NMPO$

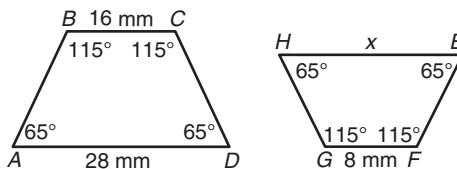


Given each pair of similar figures, determine the length of the unknown side,  $x$ .

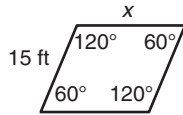
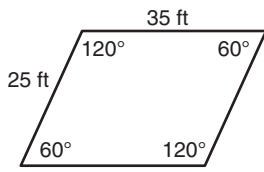
17.



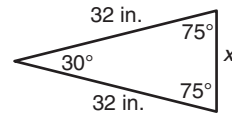
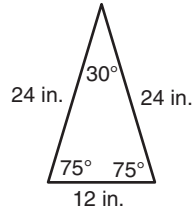
18.  $ABCD \sim EFGH$



19.

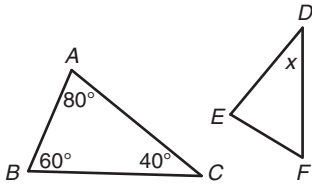


20.

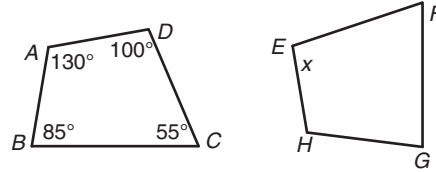


Given each pair of similar figures, determine the measure of the unknown angle,  $x$ .

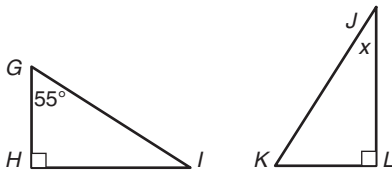
21.  $\triangle ABC \sim \triangle EFD$



22.  $ABCD \sim HGFE$



23.  $\triangle GHI \sim \triangle KIJ$



24.  $IJKL \sim NMPO$

