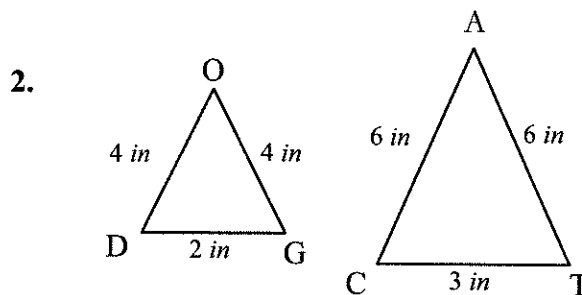
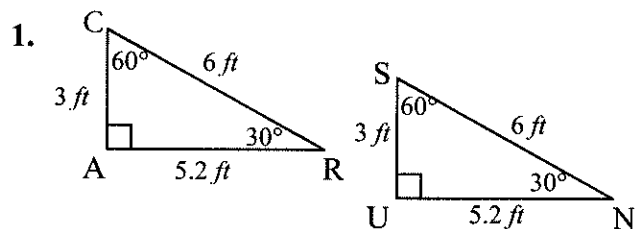


Lesson 8 ~ Similar and Congruent Figures

Name _____ Period _____ Date _____

For each pair of figures below, find the corresponding sides and corresponding angles to the ones identified.



\overline{CA} corresponds to _____ $\angle C \cong \angle$ _____

\overline{DO} corresponds to _____ $\angle D \cong \angle$ _____

\overline{AR} corresponds to _____ $\angle A \cong \angle$ _____

\overline{OG} corresponds to _____ $\angle O \cong \angle$ _____

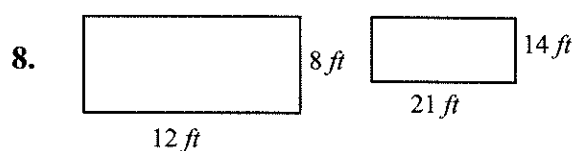
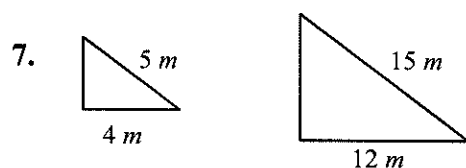
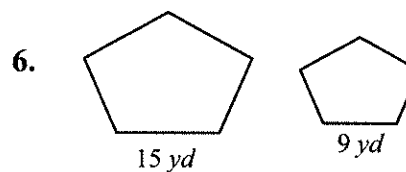
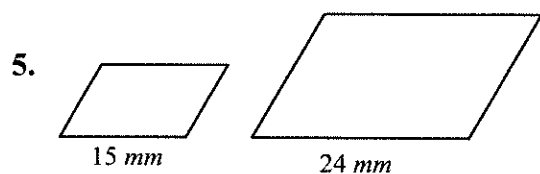
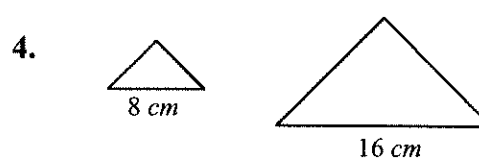
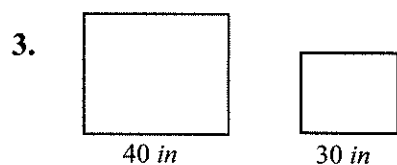
\overline{CR} corresponds to _____ $\angle R \cong \angle$ _____

\overline{DG} corresponds to _____ $\angle G \cong \angle$ _____

Are the triangles congruent or similar?
Explain.

Are the triangles congruent or similar?
Explain.

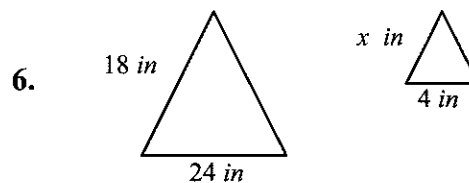
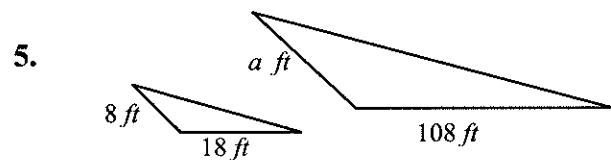
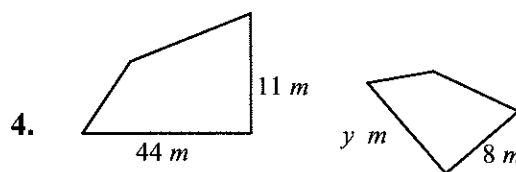
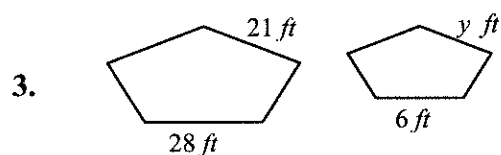
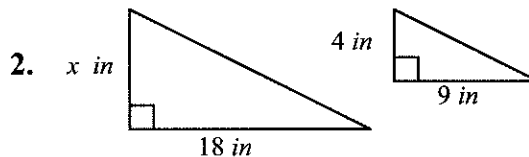
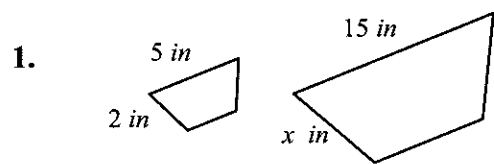
Determine the scale factor for each pair of similar figures.



Lesson 9 ~ Proportions and Similar Figures

Name _____ Period _____ Date _____

The shapes below are similar. Use proportions to solve for each variable.



7. Mike wanted to find the height of his pole barn. He measured the shadow from the pole barn on the ground to be 40 feet. He measured his own shadow on the ground to be 12 feet. Mike is 6 feet tall. Find the height of the pole barn.



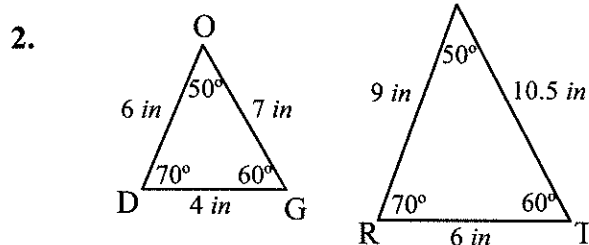
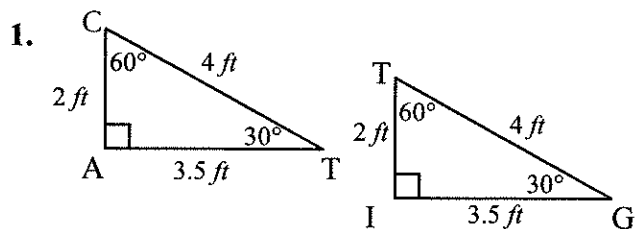
8. Paula used a mirror to find the height of a tree in her backyard. She found her eye height to be 5.5 feet and her distance to the mirror to be 1.1 feet. The mirror was 12 feet from the tree. Find the height of the tree.



Lesson 8T ~ Similar and Congruent Figures

Name _____ Period _____ Date _____

For each pair of figures below, find the corresponding sides and corresponding angles to the ones identified.



\overline{CA} corresponds to _____ $\angle C \cong \angle$ _____

\overline{DO} corresponds to _____ $\angle D \cong \angle$ _____

\overline{AT} corresponds to _____ $\angle A \cong \angle$ _____

\overline{OG} corresponds to _____ $\angle O \cong \angle$ _____

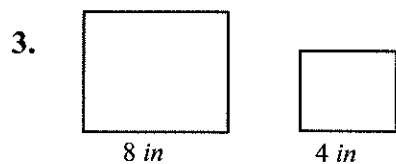
\overline{CT} corresponds to _____ $\angle T \cong \angle$ _____

\overline{DG} corresponds to _____ $\angle G \cong \angle$ _____

Are the triangles congruent or similar?
Explain.

Are the triangles congruent or similar?
Explain.

Determine the scale factor for each pair of similar figures.



left square side : right square side \rightarrow _____ : _____

simplify the ratio \rightarrow _____ : _____

