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Module 9 Characteristics of Geometric Shapes

## Challenge Problems

## Lesson 4 Similar Polygons

Set 1
(1) Give an example to prove that the following statement is not sufficient to prove quadrilaterals are similar: "All the corresponding angles of two quadrilaterals are congruent."
(2) Give an example to prove that the following statement is not sufficient to prove quadrilaterals are similar: "All the corresponding sides of two quadrilaterals are proportional."

## Set 2

(1) A three-by-three square is shown. Draw the figure with the width doubled. Then, draw the figure with both the length and the width doubled. Compare the areas to the area of the original figure. Then, determine if a $200 \%$ enlargement of a photo doubles the area of the photo.


## Additional Work Area

