

## LAUNCH:

Read through minds in Action p.281 **ON YOUR OWN**  
Then, with a partner, answer the following questions in your notes. **Be prepared to share with the class:**

What do you think?

1. Are the rectangles in the second pair scaled copies?
2. Are the rectangles in the third pair scaled copies?
3. Can you figure out what the dashed lines in the original figures might be for? Explain



## 4.5 Checking for Scaled Copies

Objective: Students will decide whether two figures are well-scaled copies of each other

### In-Class Experiment

p.283

The triangles in each pair below are scaled copies of each other. Trace and cut out the triangles in each pair. Then move the triangles around. Look for some visual clues that suggest good tests for recognizing scaled triangles. For instance, if you place one angle on top of another and find they match, what do you notice about the triangles' corresponding sides?

2.



3.



### For Discussion

4. Share your findings with your class. Did placing one angle on top of a matching angle help you decide whether the triangles are scaled copies? What other tests did you use?

## On Your Own

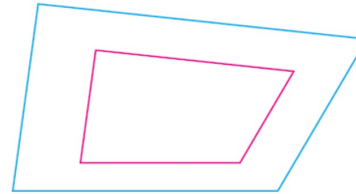
### Page 285: 3, 4, 7-9

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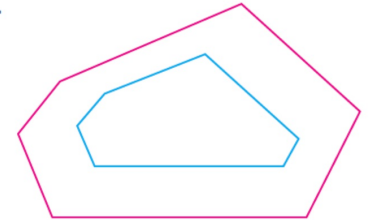
You now have tests for scaled rectangles and triangles. How can you test other polygons?

3. For each figure, decide whether the two polygons are scaled copies. Explain your decision.

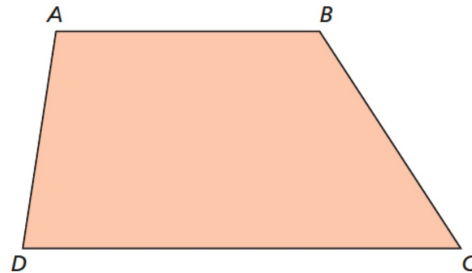
a.



b.



4. Trace trapezoid  $ABCD$ . Inside the traced trapezoid, draw another trapezoid that is a scaled copy. (You choose the scale factor.) Explain how you made the scaled copy.



7. Two angles of one triangle measure  $28^\circ$  and  $31^\circ$ . Another triangle has two angles that measure  $117^\circ$  and  $31^\circ$ . Are the triangles scaled copies? How can you tell?
8. How can you tell whether two squares are scaled copies of each other?
9. Draw two quadrilaterals that are not scaled copies but in which the sides of one quadrilateral are twice as long as the corresponding sides of the other quadrilateral.

