

9. **CCSS Persevere with Problems** Determine whether each statement is *true* or *false*. If true, explain your reasoning. If false, give a counterexample.

a. If two figures are congruent, their perimeters are equal.

true; Sample answer: If the figures are congruent, the corresponding sides have equal length. Therefore, the sum of the lengths of the sides will be equal.

b. If two figures have the same perimeter, they are congruent.

false; Sample answer: Triangle ABC has a perimeter of 24 inches. Square MNOP has a perimeter of 24 inches. They have the same perimeter but because they are different shapes, they are not congruent.

10. **CCSS Model with Mathematics** Write and solve a real-world problem that involves using the properties of congruent figures to find a missing measure. **See students' work.**
