

NAME _____

Module 10 Coordinate Geometry and Spatial Visualization
Lesson 5 Building Models

Challenge Problems

10.5

Set 1

1

Pete says that any net made from six squares can be folded into a cube. Do you agree? Explain.

2

How many different nets are there for a cube?

Set 2

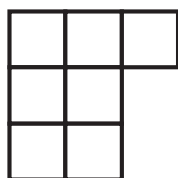
1

Molly says that the right and left views of a figure are always the same. Do you agree? Explain.

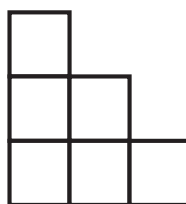
2

Sketch or build a three-dimensional figure with these views.

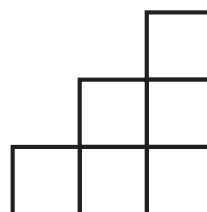
Top View



Front View



Right View

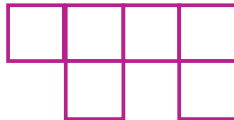


NAME _____

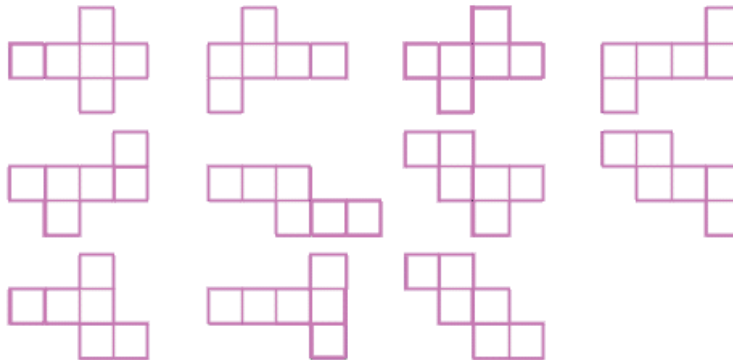
Possible Answers

Set 1

1. **Disagree.** In order to fold into a cube, the six squares of the net must be positioned correctly. If not, the net will not fold into a cube. For example, the six-square net shown here cannot be folded into a cube. If you fold it, there is a hole left on one side.

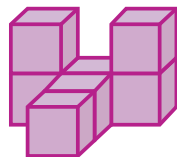


2. The 11 nets are shown below.

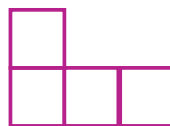


Set 2

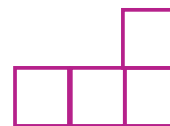
1. **No.** The left- and right-side views of a figure can be different. For example, in the figure shown here, the left-side and right-side views are not the same. They are mirror images, however.



Left view



Right view



- 2.

