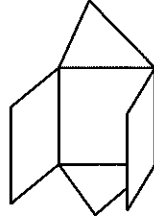


LESSON
9•9

Unfolding Geometric Solids

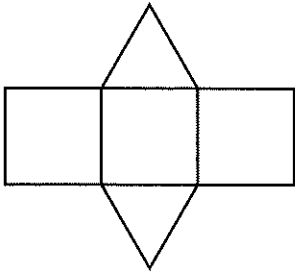


If you could unfold a prism so that its faces are laid out as a set attached at their edges, you would have a flat diagram for the shape. Imagine unfolding a triangular prism. There are different ways that you could make diagrams, depending on how you unfold the triangular prism.

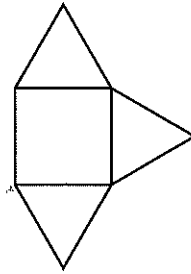


Which of the following are diagrams that could be folded to make a triangular prism?
 Write *yes* or *no* in the blank under each diagram.

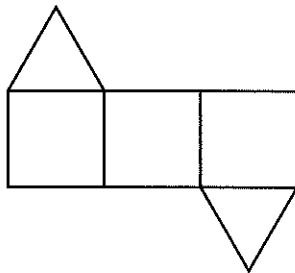
1.



2.



3.

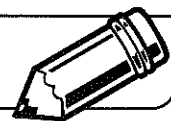


4.



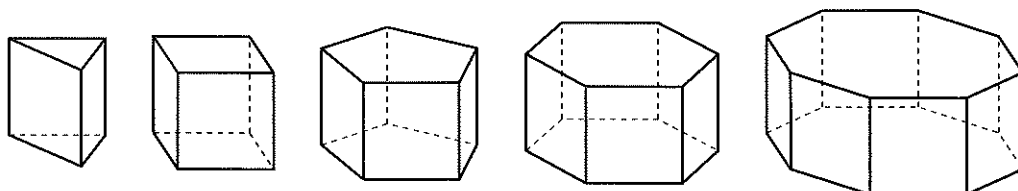
LESSON
9•9

Using Faces and Bases



The flat diagram formed from unfolding a prism so that its faces are laid out flat and attached at their edges is called a **geometric net**. For a given prism, there are different nets, depending on how you think about unfolding the prism.

1. Cut out the figures on *Math Masters*, page 287. You and your partner will use the figures to build nets for the prisms below.

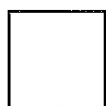


2. Take turns to select, draw, and place figures to form a net for a prism.
3. The partner who places the figure that completes the net states the number of faces and the number of bases. For example, if the net for a cube were completed, the partner would say, "4 faces, 2 bases." This ends the round.
4. A partner can also block the completion of a net. In this case, the partner would put down a figure that would prevent completing the net in the following placement and say "block." The blocked partner then has the opportunity to complete the net by placing two figures and stating the number of faces and bases. Again, this would end the round.

Example:

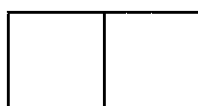
Student 1

Draw 1:



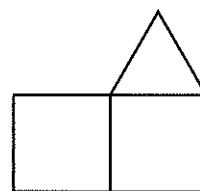
Student 2

Draw 2:



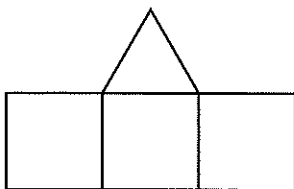
Student 1

Draw 3:



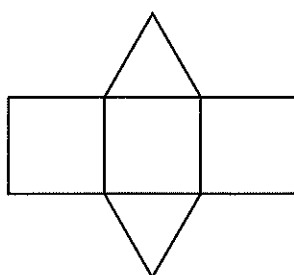
Student 2

Draw 4:



Student 1

Draw 5:



Student 1 states,
"3 faces, 2 bases."

This ends the round.