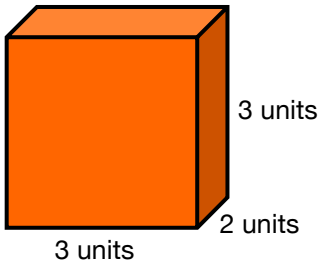
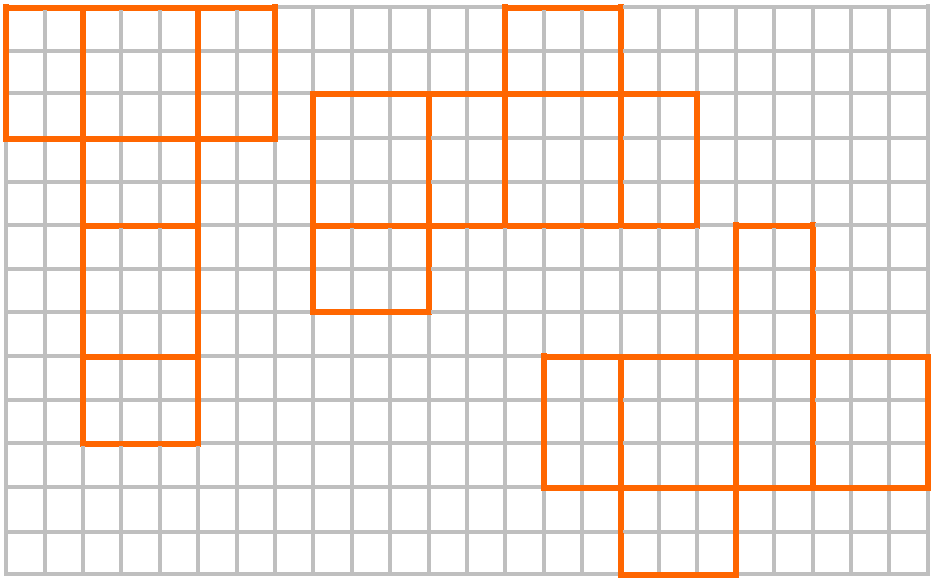
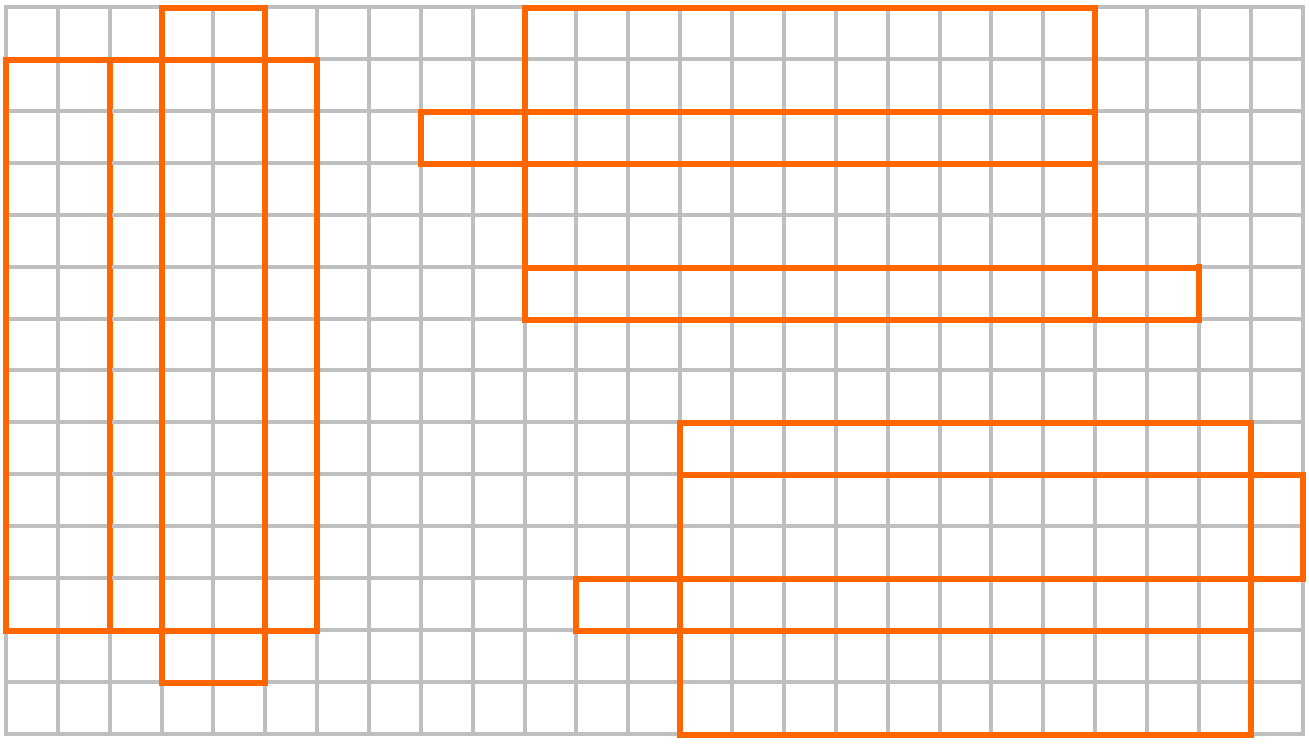
Geometric Nets

Extend Your Learning
Answers and Explanations

1. Use the grid paper shown below to draw a net for the following two rectangular prisms. There are several different ways to draw a net. Here are three possible answers for each rectangular prism.

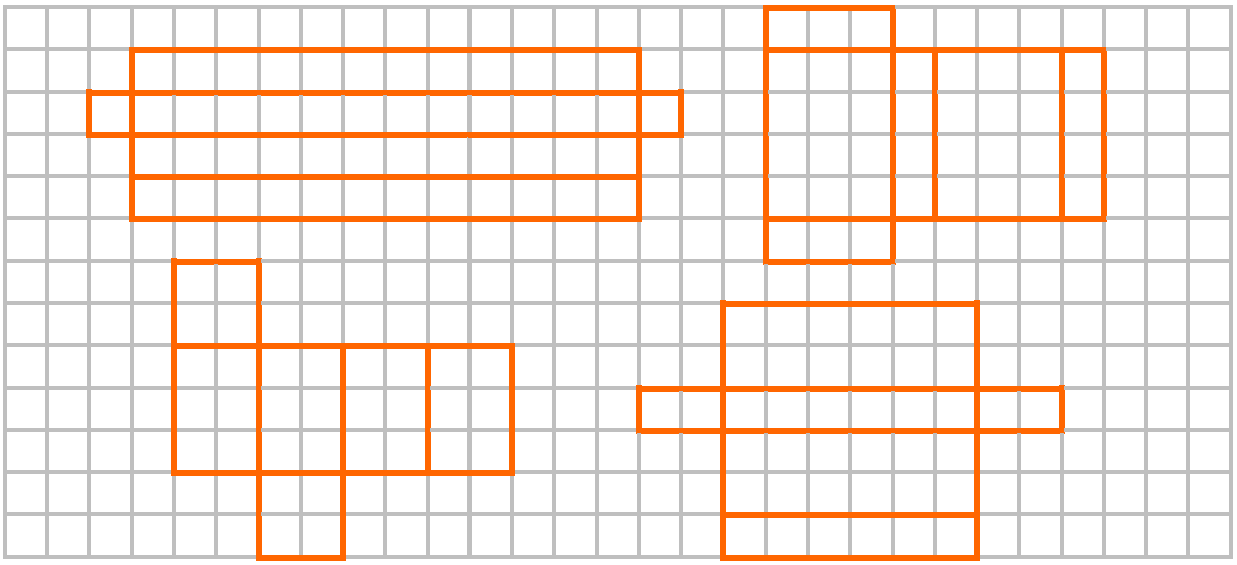




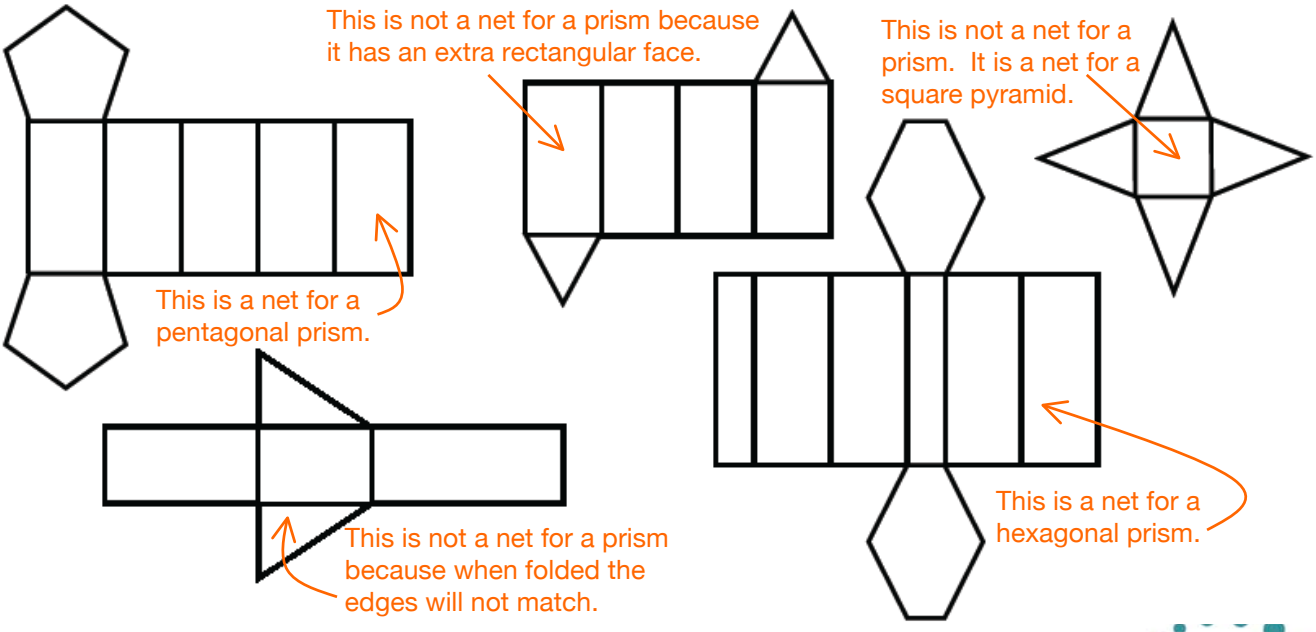


2. Rectangular prisms with the same volume can look very different from each other. Find the whole number dimensions of all possible retangular prisms with a volume of 12 cubic centimeters.
   1 cm by 1 cm by 12 cm
   1 cm by 2 cm by 6 cm
   1 cm by 3 cm by 4 cm
   2 cm by 2 cm by 3 cm

3. Design a net for two different rectangular prisms that have a volume of 12 cubic centimeters.
   There are several different ways to draw a net for each rectangular prism. Here is one possible answer for each prism.



4. Which of the following patterns will fold into a prism? If the pattern does not work, explain why it will not fold into a prism. If the pattern does work, write the name of the prism next to each net.



5. **Challenge Problem**: Draw all possible nets for a cube. There are 11 possible nets.