Grade 6  
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Unit 1, Lesson 14

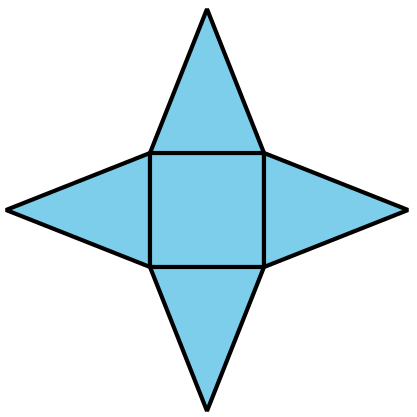
# Nets and Surface Area

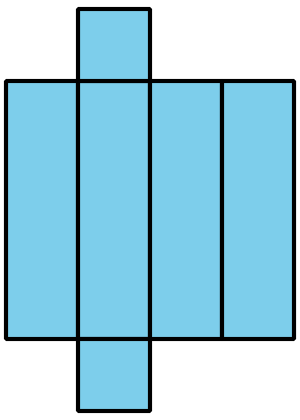
Let’s use nets to find the surface area of polyhedra.

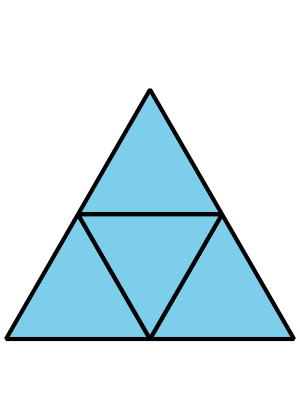
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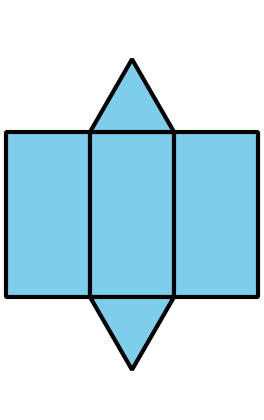
## 14.1Matching Nets

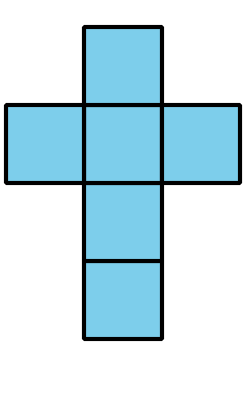
Each of the nets can be assembled into a polyhedron. Match each net with its corresponding polyhedron, and name the polyhedron. Be prepared to explain how you know the net and polyhedron go together.

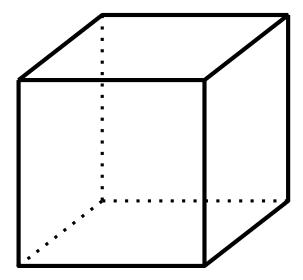
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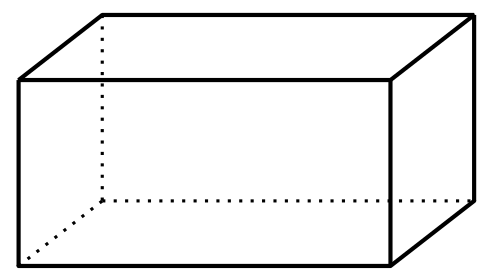
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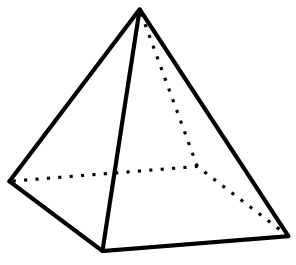
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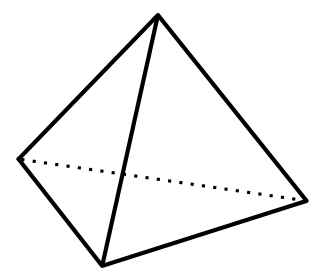
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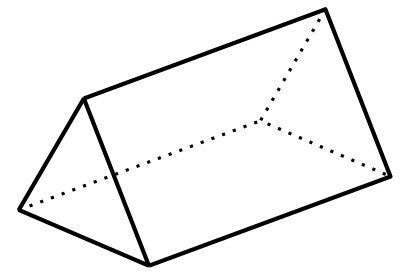
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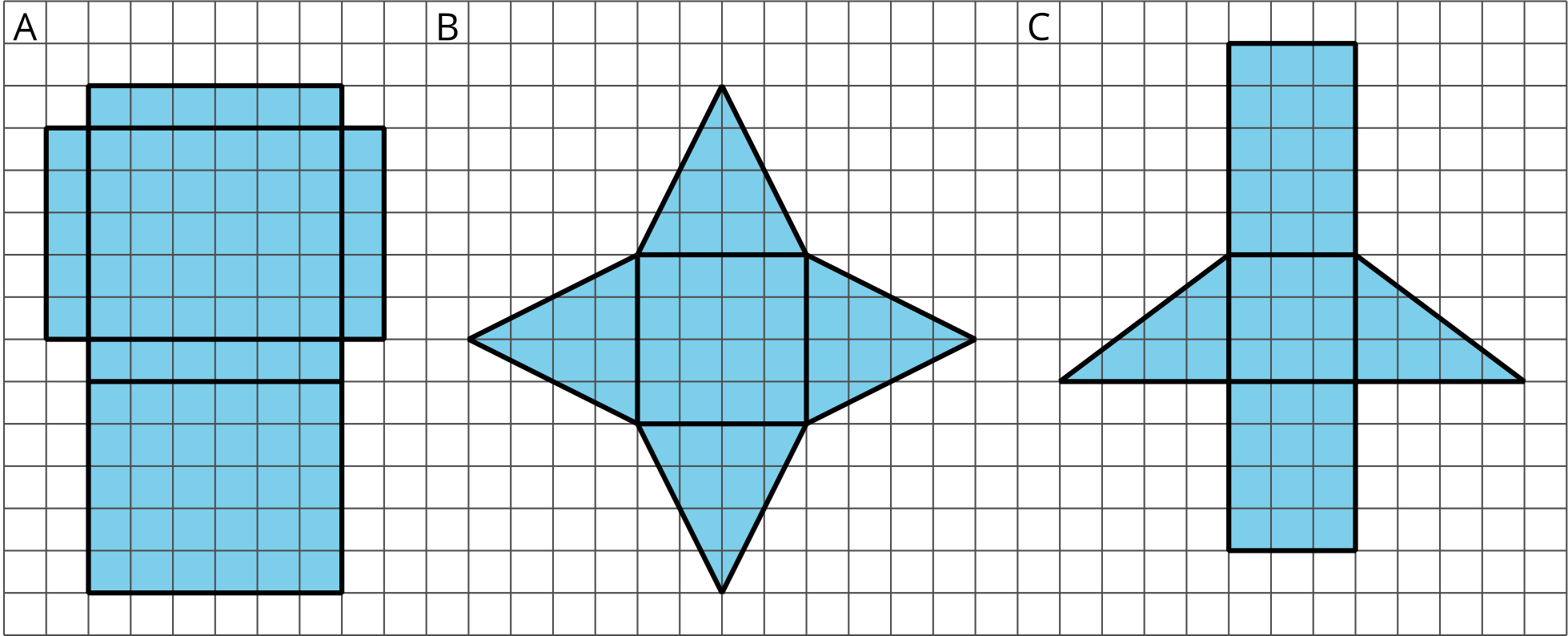
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## 14.2Using Nets to Find Surface Area

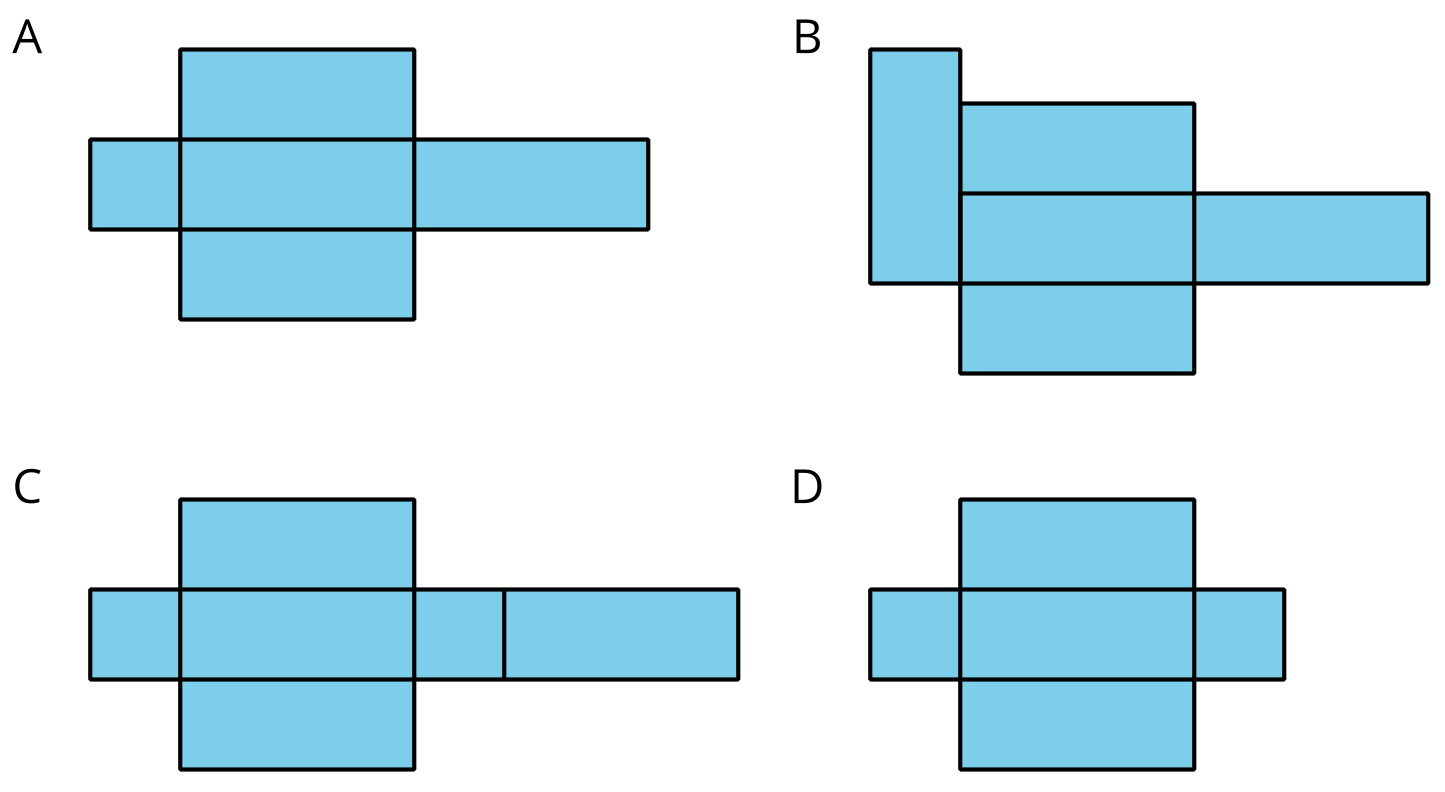
1. Name the polyhedron that each net would form when assembled.

* 

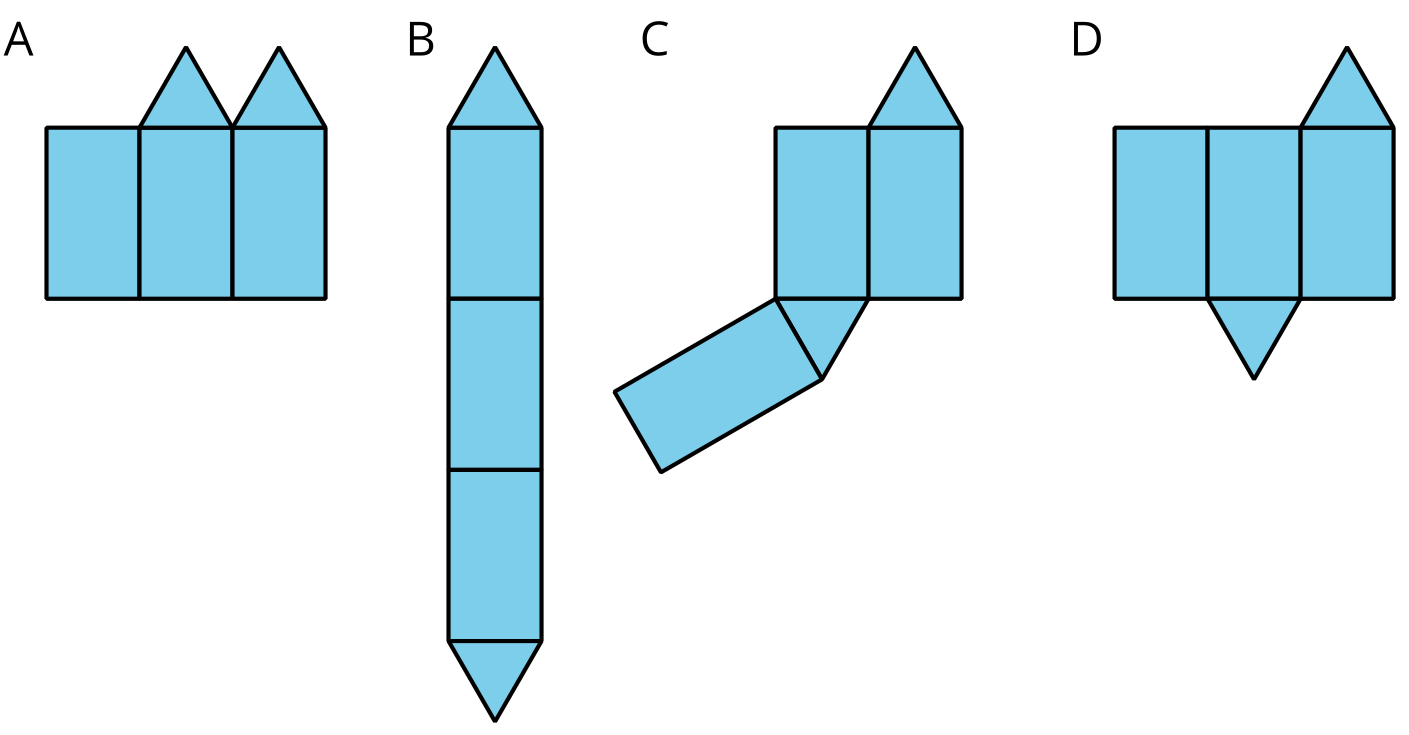
1. Your teacher will give you the nets of three polyhedra. Cut out the nets and assemble the three-dimensional shapes.
2. Find the surface area of each polyhedron. Explain or show your reasoning.

### Are you ready for more?

1. For each net, decide if it can be assembled into a rectangular prism.

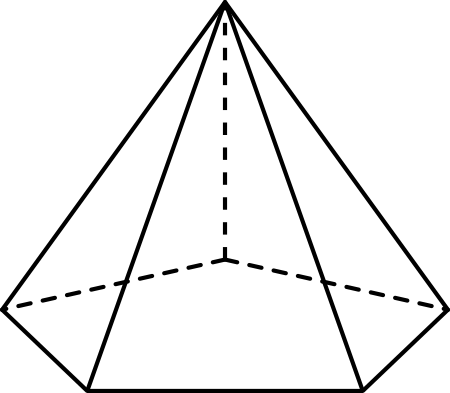
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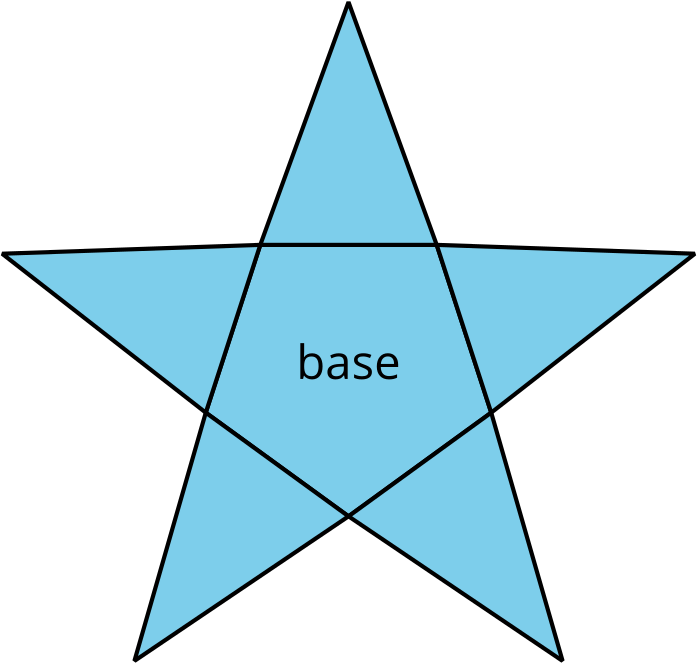
1. For each net, decide if it can be folded into a triangular prism.

* 

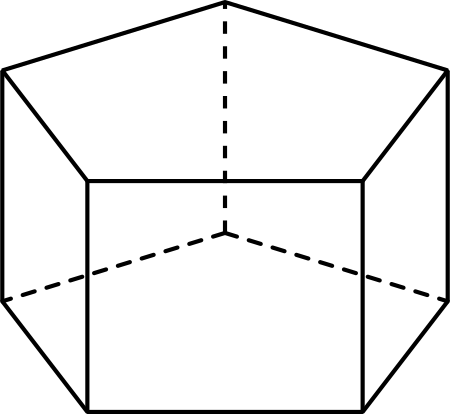
## Lesson 14 Summary

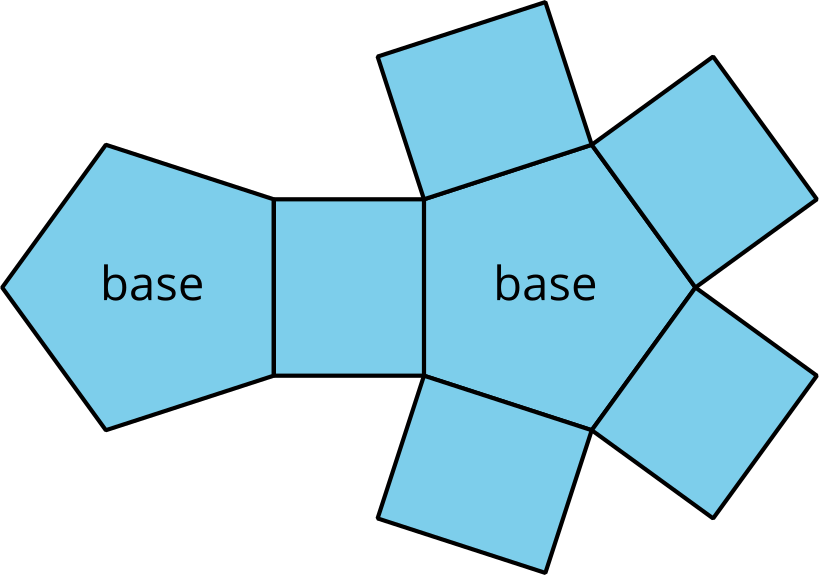
A net of a *pyramid* has one polygon that is the base. The rest of the polygons are triangles. A pentagonal pyramid and its net are shown here.



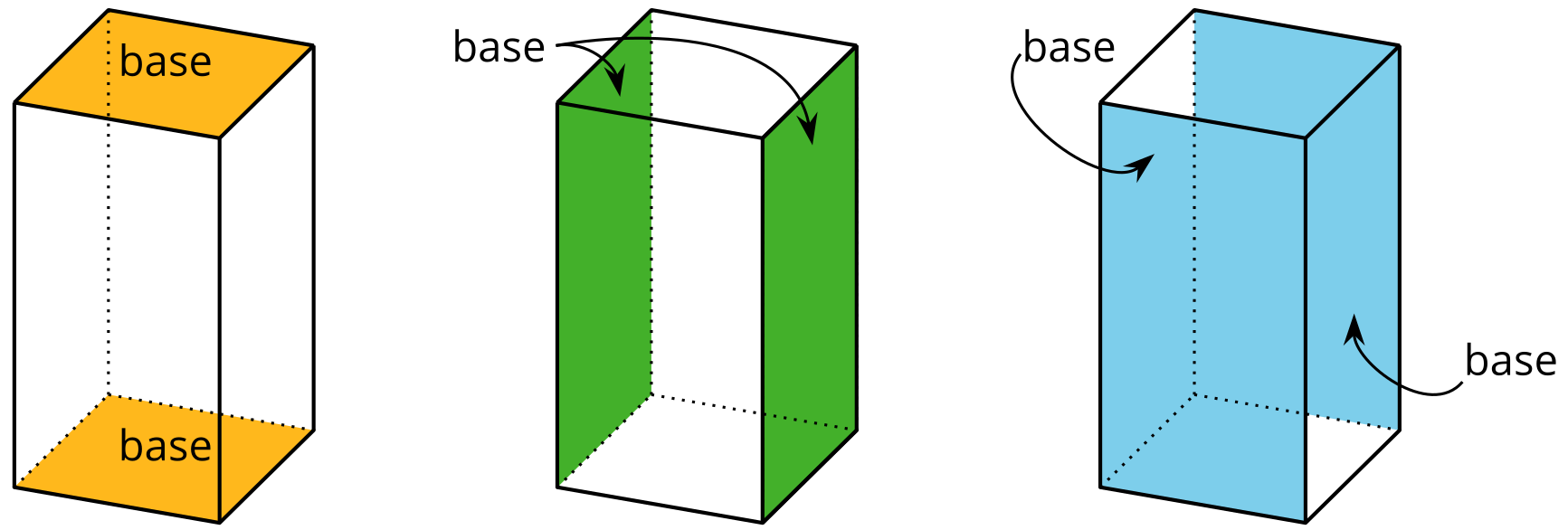


A net of a *prism* has two copies of the polygon that is the base. The rest of the polygons are rectangles. A pentagonal prism and its net are shown here.

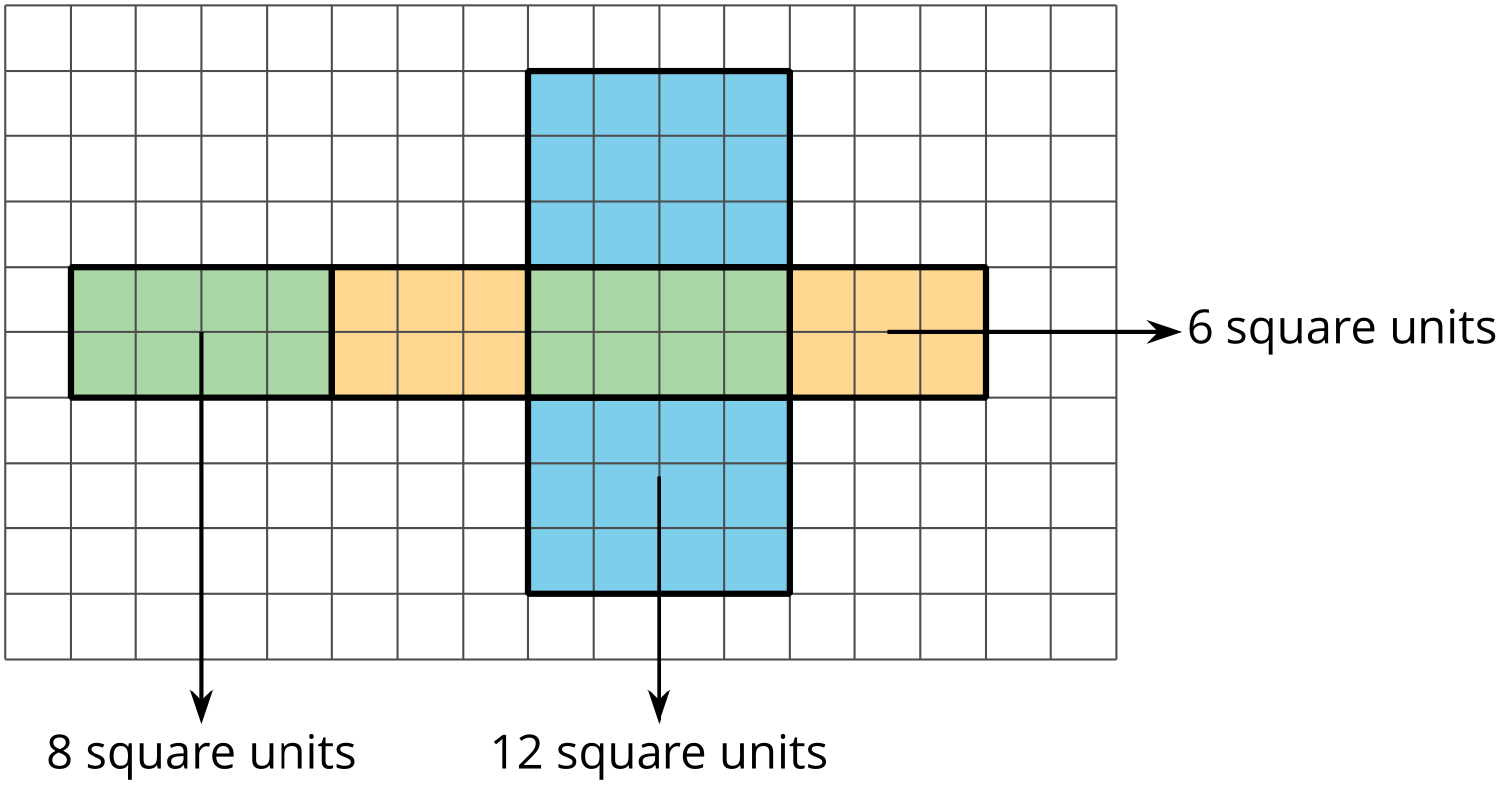




In a rectangular prism, there are three pairs of parallel and identical rectangles. Any pair of these identical rectangles can be the bases.



Because a net shows all the faces of a polyhedron, we can use it to find its surface area. For instance, the net of a rectangular prism shows three pairs of rectangles: 4 units by 2 units, 3 units by 2 units, and 4 units by 3 units.



The surface area of the rectangular prism is 52 square units because .