

# Surface Area of a Rectangular Prism

The shipping box could be described as a *three-dimensional* object.

- How would I explain or describe an object that is *three-dimensional*?

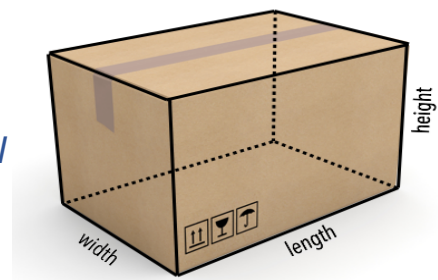


A three-dimensional object also has a *surface area*.

- How would I explain *surface area*?

The shipping box is a three-dimensional object made from two-dimensional shapes.

- How would I compare a *three-dimensional* object with a *two-dimensional* shape?

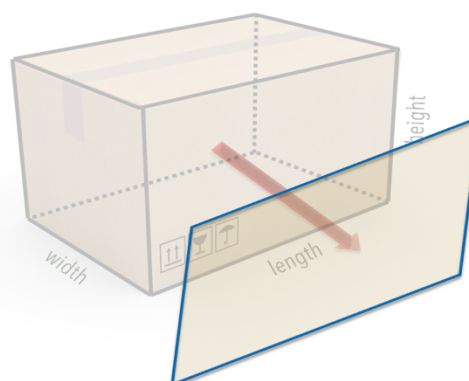


- How would I visualize all of the *two-dimensional* shapes that make up this *three-dimensional* box?

$2ab + 6bc$   
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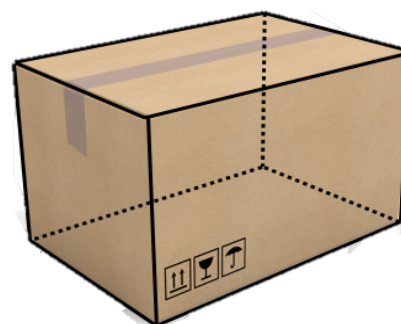


- Can I recall and explain how to calculate the *area* of a two-dimensional shape such as a rectangle?



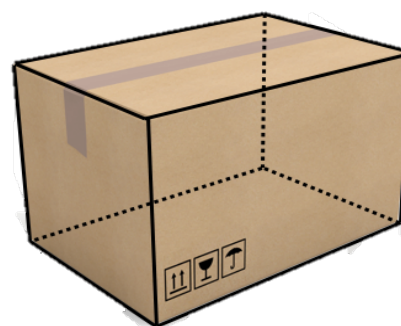
A *net* would also show the *two-dimensional* shapes that make up my *three-dimensional* object.

- How would I explain or describe a *net*?
- How would I draw the *net diagram* of my *three-dimensional* shipping box?



The dimensions of the shipping box are  $45\text{cm} \times 35\text{cm} \times 30\text{cm}$ .

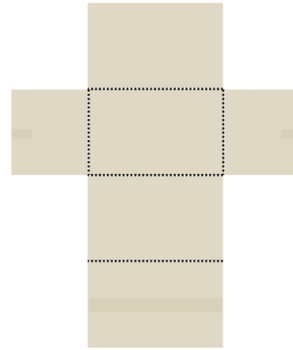
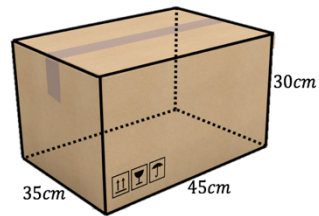
- How would I show these dimensions?



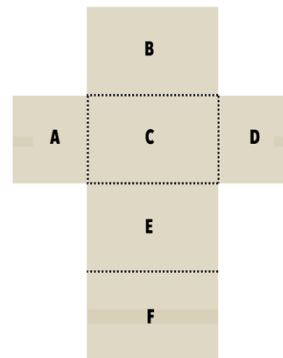
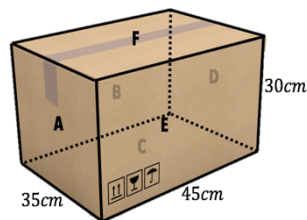




- How would a *net* allow me to determine the surface area of my shipping box?



- How would I use my prism to label the dimensions of the six rectangles on my *net*?



- How would I demonstrate using my *net* to calculate the *surface area* of the prism?

# Surface Area of a Rectangular Prism

Which statements do I feel confident explaining and demonstrating?

Which statements do I not feel confident explaining and demonstrating?

- ✓ I can compare a three-dimensional object with a two-dimensional shape
- ✓ I can visualize and describe the two-dimensional shapes that make up a three-dimensional object
- ✓ I can draw a net for a three-dimensional rectangular prism
- ✓ I can demonstrate how I calculate the area of a two-dimensional shape such as a rectangle
- ✓ I can explain surface area and demonstrate how I calculate the surface area of a rectangular prism