

Learning Target: Find the surface areas of rectangular prisms.

Success Criteria:

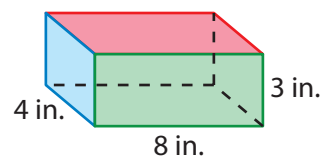
- I can draw and label a net for a rectangular prism.
- I can find the areas of the faces of a rectangular prism.
- I can use nets to find surface areas of rectangular prisms.

Think and Grow

Key Idea The **surface area** of a three-dimensional figure is the sum of the areas of all of its faces. You can use a net to find surface area.

Example Find the surface area of the rectangular prism.

Use a net to find the area of each face.



Top: $8 \times 4 =$ _____

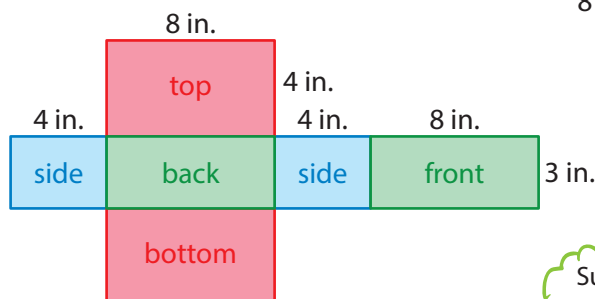
Bottom: $8 \times 4 =$ _____

Front: $8 \times 3 =$ _____

Back: $8 \times 3 =$ _____

Side: $4 \times 3 =$ _____

Side: $4 \times 3 =$ _____



Surface area is measured in square units.

Find the sum of the areas of the faces.

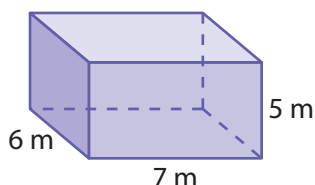
$$\begin{aligned} \text{Surface Area} &= \text{Area of top} + \text{Area of bottom} + \text{Area of front} + \text{Area of back} + \text{Area of a side} + \text{Area of a side} \\ &= \text{_____} + \text{_____} + \text{_____} + \text{_____} + \text{_____} + \text{_____} \\ &= \text{_____} \end{aligned}$$

So, the surface area is _____.



Show and Grow

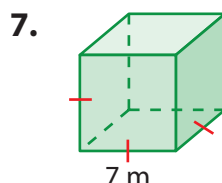
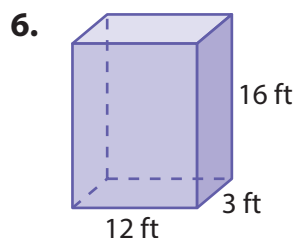
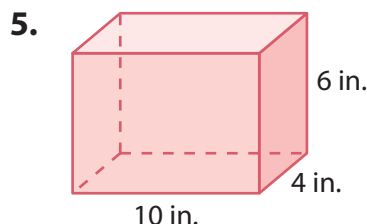
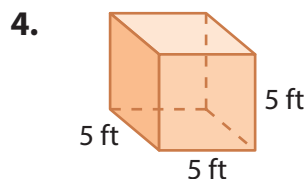
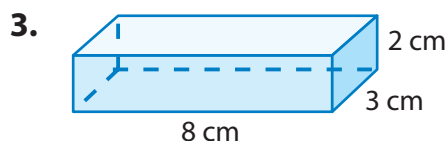
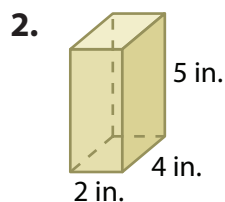
1. Find the surface area of the rectangular prism.



Practice

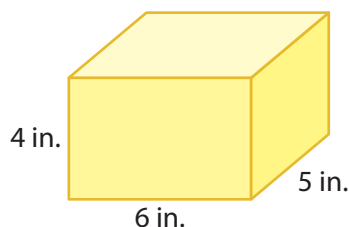
Name _____

Find the surface area of the rectangular prism.

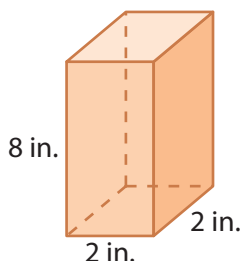
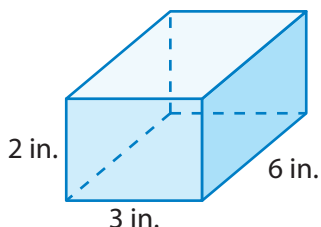


8. A crayon box is a rectangular prism. The box is 3 inches long, 1 inch wide, and 4 inches tall. What is the surface area of the crayon box?

9. **YOU BE THE TEACHER** Your friend says the surface area of the rectangular prism is 74 square inches. Is your friend correct? Explain.



10. **MP Structure** Compare the dimensions and surface areas of the rectangular prisms. What do you notice?



11. **Modeling Real Life** You have 1 pint of paint, which covers 50 square feet. Do you have enough paint to cover the entire wooden chest? Explain.

