# Determine Surface Area of Prisms

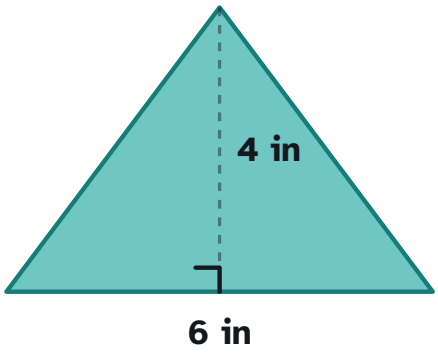
Find the surface area of rectangular and triangular prisms.

**Name** _____ **Date** _____

## Tonight's spark

A rec center makes a model tent from cloth. Each triangle end has a base of 6 inches and a height of 4 inches. The tent is 10 inches long. The two slanted sides are 5 inches each. How much cloth covers every outside face?

**Guess first: is it more than 100 square inches, or less?**




**Our class model: add every face**

## Try it

Work it out on paper. Write one answer on each line.

**1** **How many faces does a triangular prism have?**

**A.** 4 **B.** 5 **C.** 6 **D.** 3

**My answer** _____

**2** **A rectangular prism is 5 by 3 by 2. What is the area of the 5 by 3 face?**

**A.** 15 square units **B.** 8 square units **C.** 30 square units

**My answer** _____

**3** **The faces of a box have areas 6, 8 and 12, and each area appears twice. What is the surface area?**

**A.** 26 square units **B.** 46 square units **C.** 52 square units

**My answer** _____

**4** **A cube has edges of 4 cm. What is its surface area?**

**A.** 16 $cm^2$ **B.** 24 $cm^2$ **C.** 64 $cm^2$ **D.** 96 $cm^2$

**My answer** _____

**5** **A box is 6 cm long, 4 cm wide and 3 cm tall. What is its surface area?**

**A.** 54 $cm^2$ **B.** 108 $cm^2$ **C.** 72 $cm^2$ **D.** 13 $cm^2$

**My answer** _____

### Talk about it

Which faces are pairs, and why do you double each area?

### Home mission

Find a cereal box. Count its faces out loud. Which faces match each other? Then name the biggest face.

### If we get stuck, ask

- How many faces does this prism have? Let's list each one.
- Did we add the area of every single face?
- Is this surface area (square units) or volume (cubic units)?

**Do it on a screen**

Scan or type the link. Same lesson, with hints.

**eduwonderlab.com/lessons/5-7/homework.html**

**How did it feel? (optional)**

Tricky Getting there Got it