

Draw a diagram of the rectangular prism described. Then find the surface area.

7. 5 ft by 8 ft by 2 ft

8. 9 m by 4 m by 12 m

9. 10 cm by 7 cm by 5 cm

10. 15 yd by 11 yd by 6 yd



In Exercises 11–14, use the following information. A magician is planning to make a building disappear. The magician needs to make a cloth cover for the building in the shape of a rectangular prism that is 22 feet wide, 28 feet long, and 14 feet high.

11. Find the area of each of the faces of the building.

- 12. Tell which face or faces do not need to be covered.
- **13.** Find the surface area of the part of the building that will be covered.
- **14.** The magician has 2000 square feet of cloth. Will this be enough to make the cover?

In Exercises 15 and 16, use the following information. A closed and an opened spaghetti box are shown in the diagram.



15. Find the surface area of the closed box.

16. The top and bottom flaps in the box shown at the right are each 4 centimeters by 2 centimeters. The right and left flaps are each 2 centimeters by 2 centimeters. There are flaps at the other end that are identical. Find the total area of cardboard used to make the box.