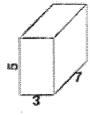


Perimeter and Area Worksheet 1 Date Name Solve the problems below using your knowledge of perimeter and area concepts. 1. A game card has a length of 10 centimeters and a width of 5 centimeters. What is its perimeter? 2. A parallelogram has a base of 3 inches and a height of 7 inches. What is its area? 3. A square-shaped garden has a side of 6 feet. What is its area? 4. A triangular-shaped yard has a base of 25 meters and a height of 12 meters. What is its area? 5. A trapezoid has bases of 9 inches and 7 inches and a height of 5 inches. What is its area? 6. A large window has a length of 8 feet and a width of 6 feet. What is its area? 7. The perimeter of a square is 220 centimeters. What is the length of each side? 8. If one side of a stop sign measures 12 inches, then what is its perimeter? 9. A trapezoid has bases of 7 centimeters and 5 centimeters and a height of 3 centimeters. What is its area? 10. A rectangular piece of paper has a width of 16 inches and an area of 192 square inches. What is its length? 11. A square garden has a side of 22 meters. How many meters of fence are needed to enclose the garden? 12. A chessboard has an area of 100 square inches. What is its perimeter?

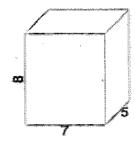
Volume/Surface Area

1 a.



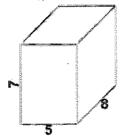
Find the surface area of this rectangular prism.

1 b.



Find the volume of this rectangular prism.

2 a.



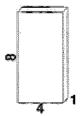
Find the volume of this rectangular prism.

2 b.



Find the surface area of this rectangular prism.

3 a.



Find the surface area of this rectangular prism.

3 b.



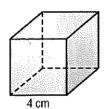
Find the surface area of this rectangular prism.

Practice: Word Problems

Surface Area of Rectangular Prisms

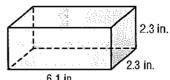
- 1. PACKAGING A packaging company needs to know how much cardboard will be required to make boxes 18 inches long, 12 inches wide, and 10 inches high. How much cardboard will be needed for each box if there is no overlap in the construction?
- 2. INSULATION Jane needs to buy insulation for the inside of a truck container. The container is a rectangular prism 15 feet long, 8 feet wide, and $7\frac{1}{2}$ feet high. How much insulation should Jane buy if all inside surfaces except the floor are to be insulated?

3. ICE Suppose the length of each edge of a cube of ice is 4 centimeters. Find the surface area of the cube.



4. ICE Suppose you cut the ice cube from Exercise 3 in half horizontally into two smaller rectangular prisms. Find the surface area of one of the two smaller prisms.

- **5. CONTAINERS** What is the total surface area of the inside and outside of a container in the shape of a rectangular prism with length of 5 meters, width of 3 meters, and height of 2.2 meters?
- **6. TOYS** Oscar is making a play block for his baby sister by gluing fabric over the entire surface of a foam block. How much fabric will Oscar need?

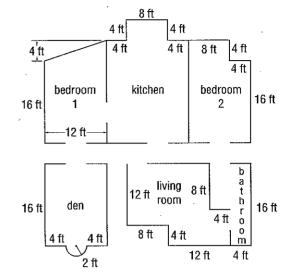




Practice: Word Problems

Area of Complex Figures

ARCHITECTURE For Exercises 1-6 use Jaco's preliminary design of his vacation house at the right. Round to the nearest tenth if necessary.



- 1. What type of figure is bedroom 1? Find the area of bedroom 1.
- **2.** What is the area of the bedroom 2? What figures did you use to find the area?

- **3.** What is the area of the bathroom? What are the dimensions of the figures you used to find this area?
- **4.** What is the area of the living room? How many figures did you use to find this area?

- 5. What is the area of the den? What would the area of the den be if the semicircular window were removed and replaced with a flat window?
- 6. What is the area of the kitchen? If Jaco adds a rectangular cooking island in the middle of the kitchen with dimensions 6 feet by 4 feet, how many square feet of walking space will be left?