



PRACTICE



TUTORIAL

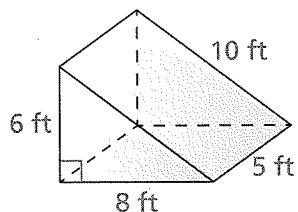
Name: _____

7-6 Additional Practice

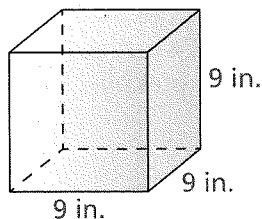
Scan for
Multimedia

In 1–6, find the surface area of each prism.

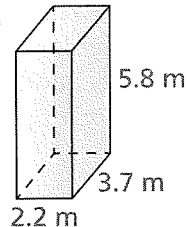
1.



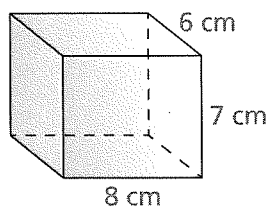
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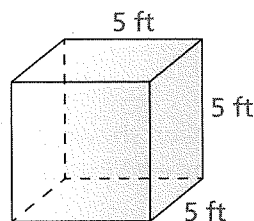
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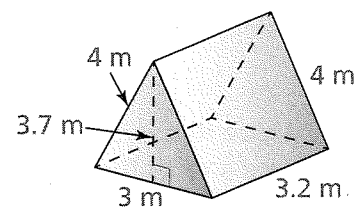
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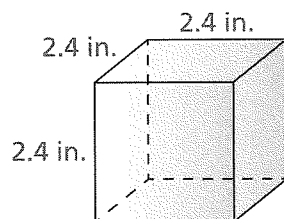
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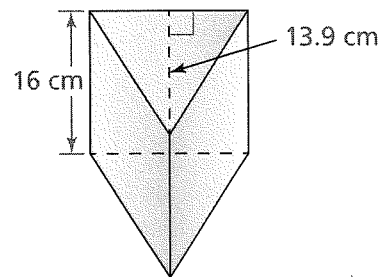
6.



7. A factory produces cube-shaped boxes like the figure shown. Find the surface area of one box.



8. **Make Sense and Persevere** The triangular faces of the prism shown are equilateral triangles with a perimeter of 48 cm. Each of the other faces is a square. Find the surface area of the prism.



9. Ayasha and Michael draw cubes. Each side of Ayasha's cube has a length of 7 m. Each side of Michael's cube has a length that is double the length of Ayasha's cube. Compare the surface areas of the cubes.

10. **Be Precise** A box is shaped like a rectangular prism. The length is $1\frac{1}{4}$ ft, the width is 8 in., and the height is 10 in. Find the surface area of the box in square inches.



In 11–14, use the table.

11. Fill in the area of each color tile.

12. **Make Sense and Persevere** Mora wants to tile the surface of a rectangular storage case that is 24 inches long, 16 inches wide, and 8 inches tall. If she uses all green tiles, how many tiles will she need?

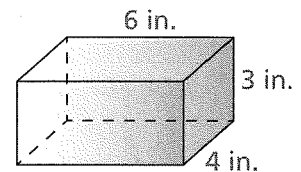
Color	Tile Size	Area
Black	4 in. × 4 in.	<input type="text"/>
Red	2 in. × 2 in.	<input type="text"/>
Green	8 in. × 8 in.	<input type="text"/>

13. If Mora uses all black tiles, how many tiles will she need?

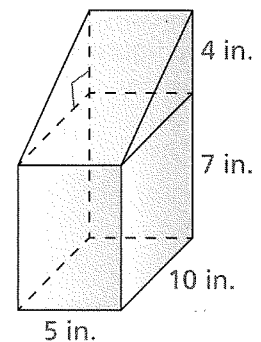
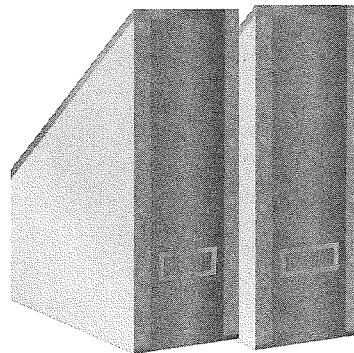
14. Mora has another storage case that is a cube. The length of each side is 18 inches. If she uses all red tiles to tile the case, how many tiles will she need?

15. **Critique Reasoning** Emilio used the expression shown to find the surface area of the prism. Is his expression correct? Explain.

$$SA = 2(12) + 2(18) + 2(12)$$



16. **Higher Order Thinking** Alexa draws and labels the diagram to represent the file organizers shown. She wants to cover the outside and bottom of the organizers with decorative paper. Explain how she can use her model to find the least amount of paper she will need.



Assessment Practice

17. What is the surface area of a rectangular prism with a length of 2.8 meters, width of 4.3 meters, and a height of 6.2 meters?

18. What is the surface area of a cube if each side has a length of 3.45 meters?