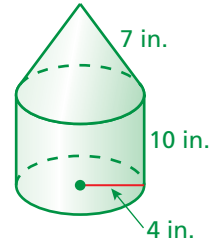


6.6 Exercises



Vocabulary and Concept Check

- OPEN-ENDED** Draw a composite solid formed by a triangular prism and a cone.
- REASONING** Explain how to find the surface area of the composite solid.



Practice and Problem Solving

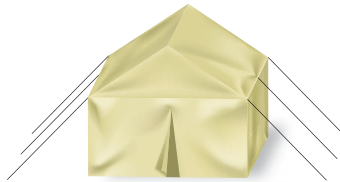
Identify the solids that form the composite solid.

1

3.



4.



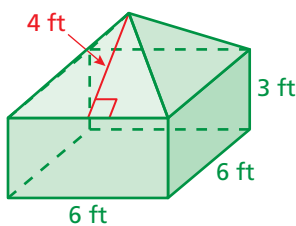
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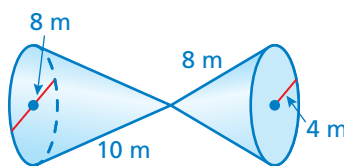
Identify the solids that form the composite solid. Then find the surface area. Round your answer to the nearest tenth.

2 3

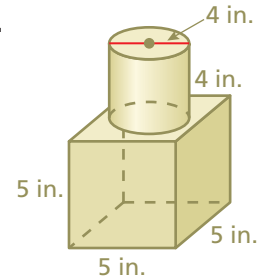
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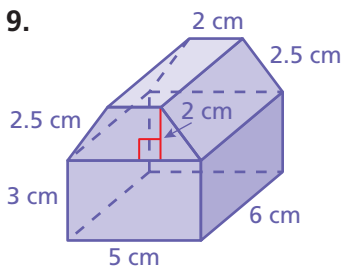
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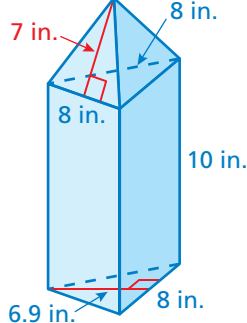
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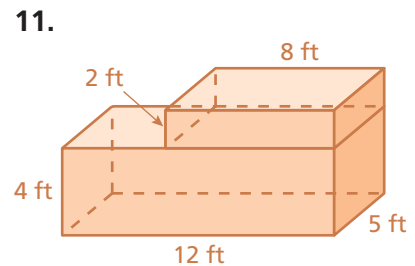
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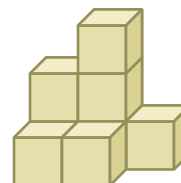
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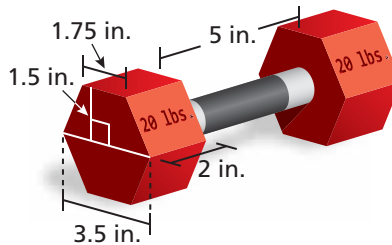
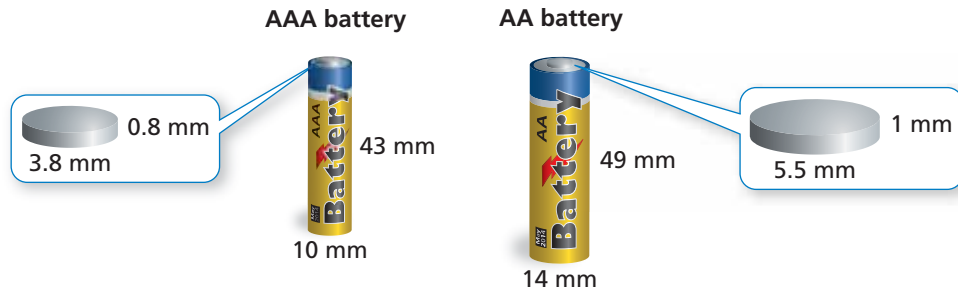
11.



- OPEN-ENDED** The solid is made using eight cubes with side lengths of 1 centimeter.
 - Draw a new solid using eight cubes that has a surface area less than that of the original solid.
 - Draw a new solid using eight cubes that has a surface area greater than that of the original solid.

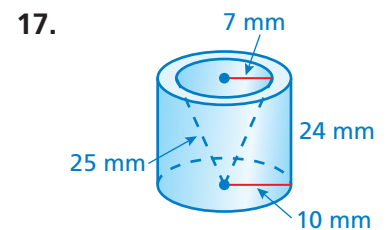
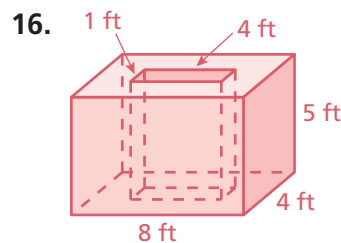
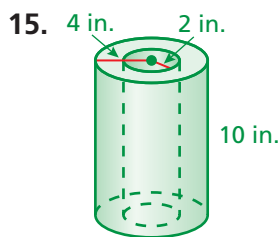


13. **BATTERIES** What is the percent increase in the surface area of the AAA battery to the AA battery? Round your answer to the nearest tenth of a percent.

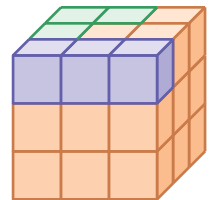


14. **BARBELL** The diameter of the handle of a barbell is 1 inch. The hexagonal weights are identical. What is the surface area of the barbell?

REASONING Find the surface area of the solid. Round your answer to the nearest tenth.

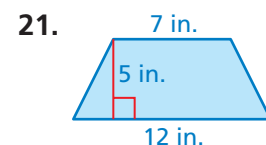
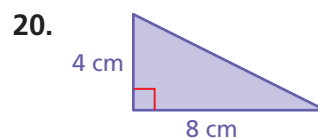
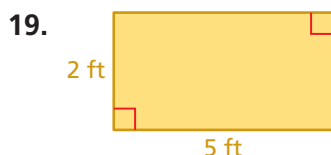


18. **Critical Thinking** The cube is made with 27 identical cubes. All cubes that cannot be seen are orange. Is the surface area of the solid formed without the purple cubes *greater than*, *less than*, or *equal to* the surface area of the solid formed without the green cubes? Explain your reasoning.



Fair Game Review What you learned in previous grades & lessons

Find the area.



22. **MULTIPLE CHOICE** A cliff swallow nest is 86 meters above a canyon floor. The elevation of the nest is -56 meters. What is the elevation of the canyon floor?

(A) -142

(B) -30

(C) 30

(D) 142