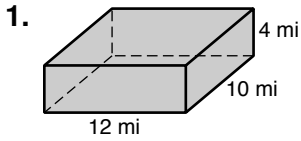
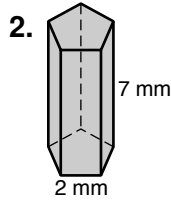


LESSON **Practice B**
10-4 **Surface Area of Prisms and Cylinders**

Find the lateral area and surface area of each right prism. Round to the nearest tenth if necessary.



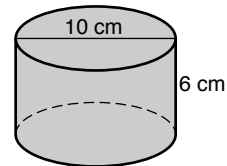
the rectangular prism



the regular pentagonal prism

3. a cube with edge length 20 inches _____

Find the lateral area and surface area of each right cylinder. Give your answers in terms of π .

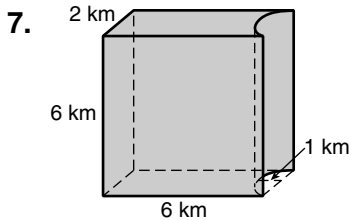


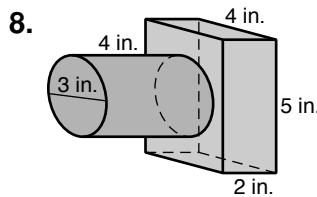
4. _____

5. a cylinder with base area $169\pi \text{ ft}^2$ and a height twice the radius

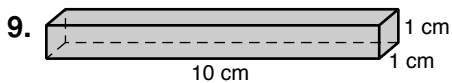
6. a cylinder with base circumference $8\pi \text{ m}$ and a height one-fourth the radius

Find the surface area of each composite figure. Round to the nearest tenth.

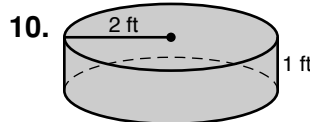




Describe the effect of each change on the surface area of the given figure.



The dimensions are multiplied by 12.



The dimensions are divided by 4.

Toby has eight cubes with edge length 1 inch. He can stack the cubes into three different rectangular prisms: 2-by-2-by-2, 8-by-1-by-1, and 2-by-4-by-1. Each prism has a volume of 8 cubic inches.

11. Tell which prism has the smallest surface-area-to-volume ratio. _____

12. Tell which prism has the greatest surface-area-to-volume ratio. _____