Name _____ Date _____ Class _____

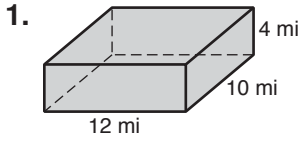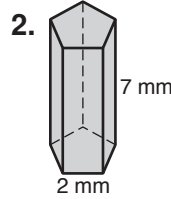## Practice B
Surface Area of Prisms and Cylinders

Find the lateral area and surface area of each right prism. Round to the nearest tenth if necessary.
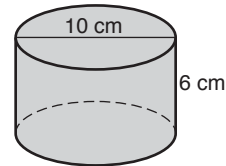
1.

the rectangular prism

_____

2.

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. _____
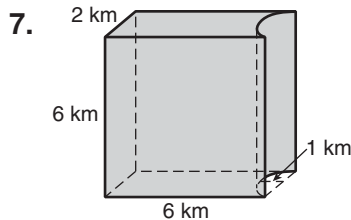
5. a cylinder with base area 169π ft^2 and a height twice the radius

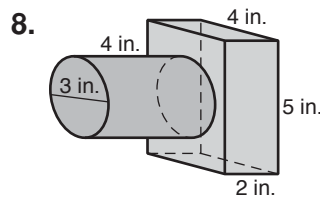**6.** a cylinder with base circumference 8π m and a height one-fourth the radius

_____

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

7.
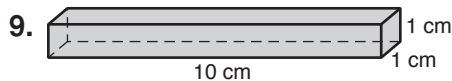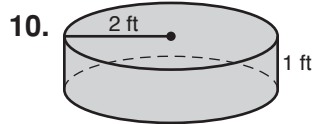

8.

_____

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

9.

The dimensions are multiplied by 12.

_____

10.

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. _____

Holt Geometry