Name: _____ Date: _____

Surface Area

Calculating Surface Area of a Cylinder

$SA = 2B + Ch$, where B = area of the base (πr^2), C = circumference of the base (πd), and h = height

Step 1: Find the base and calculate its area.

$B = \pi r^2$

$B = 3.14 \cdot 6^2$

$B = 3.14 \cdot 36$

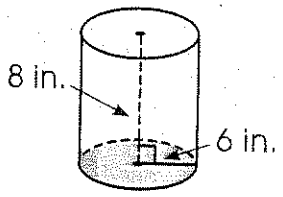
$B = 113.04 \text{ in.}^2$

Step 2: Calculate the circumference of the base.

$C = \pi d$

$C = 3.14 \cdot 12$

$C = 37.68 \text{ in.}$



Step 3: Find the cylinder's height.

$h = 8 \text{ in.}$

Step 4: Substitute the base's area, the base's circumference, and the height into the formula.

$SA = 2B + Ch$

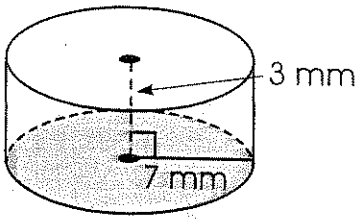
$SA = 2(113.04) + (37.68)(8)$

$SA = 226.08 + 301.44$

$SA = 527.52 \text{ in.}^2$

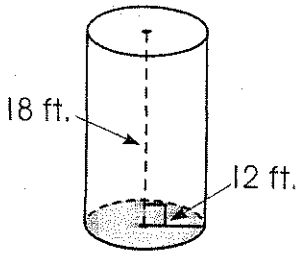
Use a calculator to find the surface area of each cylinder. Show your work on a separate sheet of paper. Round to the nearest hundredth.

1.



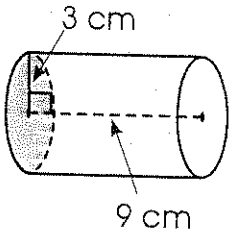
SA = _____

2.



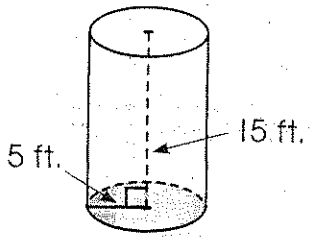
SA = _____

3.



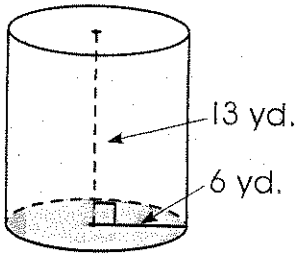
SA = _____

4.



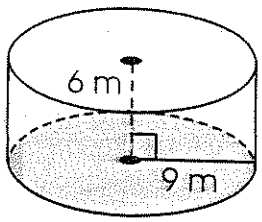
SA = _____

5.



SA = _____

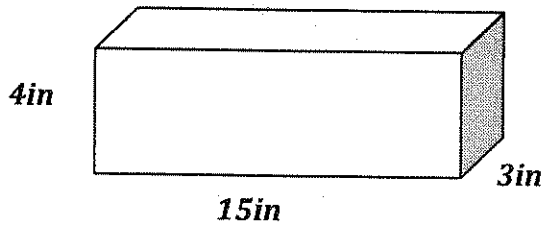
6.



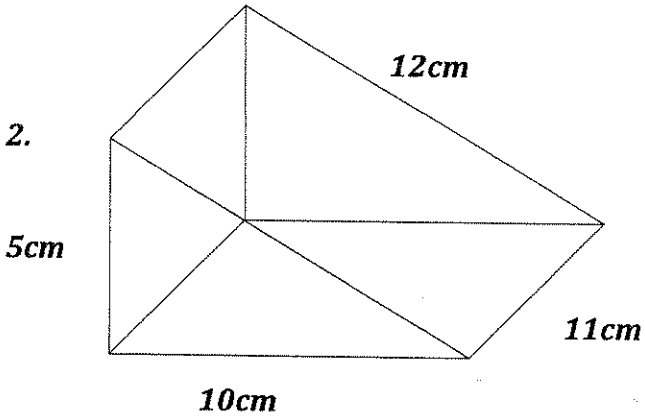
SA = _____

Find the Surface Area of the following figures:

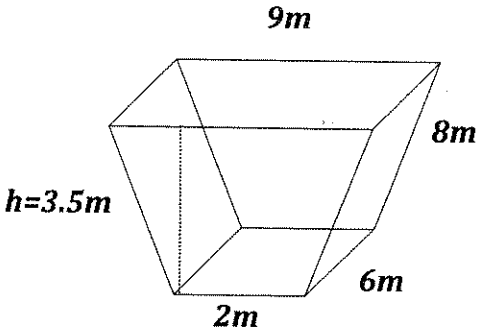
1.



2.



3.



4.