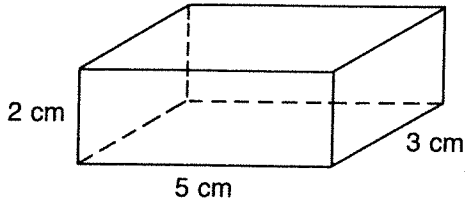


Reteaching Worksheet 13-4

Surface Area of Prisms

To find the surface area, find the area of each surface. Then add the areas.

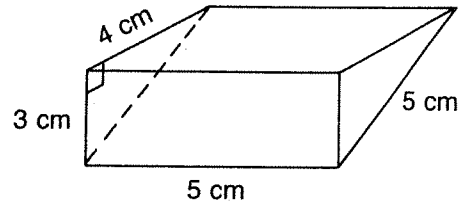
Rectangular Prism



Area:

Top and bottom:	$2 \cdot (5 \cdot 3) = 30 \text{ cm}^2$
Front and back:	$2 \cdot (2 \cdot 5) = 20 \text{ cm}^2$
+ Two sides:	$2 \cdot (2 \cdot 3) = 12 \text{ cm}^2$
Total surface area	62 cm^2

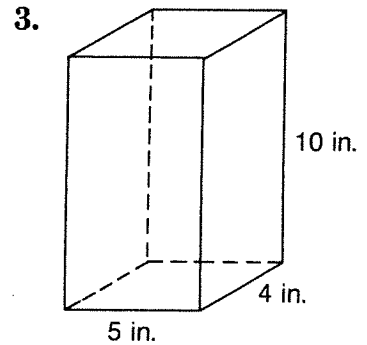
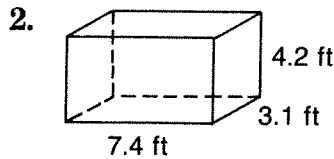
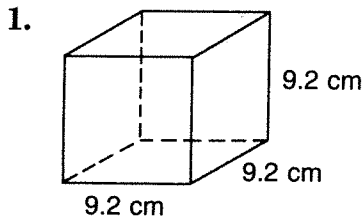
Triangular Prism



Area:

Top:	$4 \cdot 5 = 20 \text{ cm}^2$
Front:	$3 \cdot 5 = 15 \text{ cm}^2$
Bottom:	$5 \cdot 5 = 25 \text{ cm}^2$
+ Two sides:	$2 \cdot \left(\frac{1}{2} \cdot 3 \cdot 4\right) = 12 \text{ cm}^2$
Total surface area	72 cm^2

Find the surface area of each rectangular prism. Round to the nearest whole number.



Reteaching Worksheet 13-5

Surface Area of Cylinders

7 in.

14 in.

$C = 2\pi r \quad \pi \approx 3.14$
 $C = 43.96$
 $C \approx 44$
 $A = l \times w$
 $A = 44 \times 14$
 $A = 616$

7

$A = \pi r^2$
 $A = \pi \times 7^2$
 $A = 153.86$
 $A \approx 154$

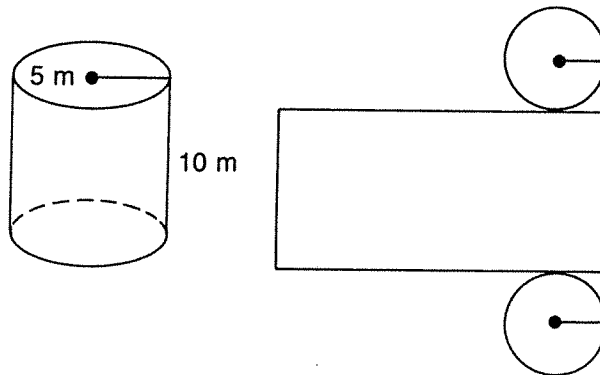
7

Area—
Same as top

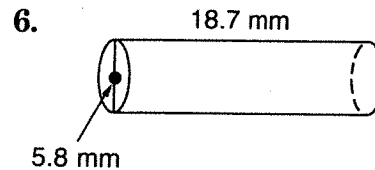
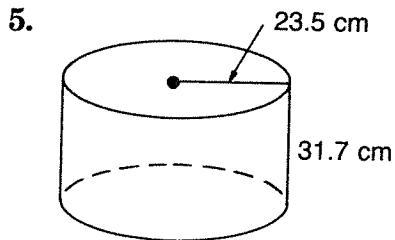
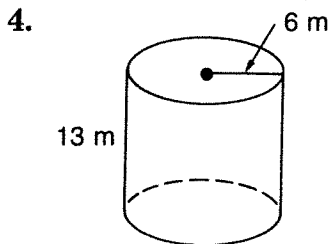
Total surface area
 154
 154
 + 616
 about 924 square inches

Use the figures at the right.

1. Label the dimensions of the rectangle and the two circles.
2. Find the area of the rectangle and of each circle.
3. Find the surface area of the cylinder.



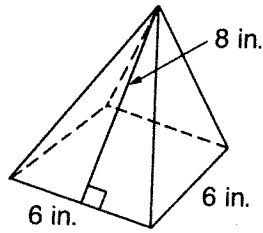
Find the surface area of each cylinder. Round as in the example above.



Reteaching Worksheet 13-6

Surface Area of Pyramids and Cones

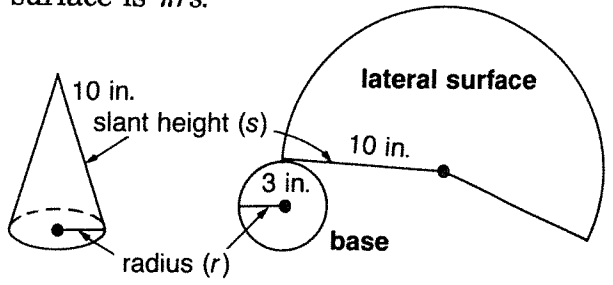
To find the surface area of a pyramid, add the areas of each of the faces and the area of the base.



Area:

Base:	$6 \cdot 6$	$= 36 \text{ in}^2$
+ Four faces:	$4 \cdot \left(\frac{1}{2} \cdot 6 \cdot 8\right)$	$= 96 \text{ in}^2$
Total surface area		132 in²

To find the surface area of a cone, add the area of its circular base and the area of its lateral surface. The area of the lateral surface is πrs .



Area:

Base:	$3.14 \cdot 3 \cdot 3$	$= 28.26 \text{ in}^2$
+ Lateral surface:	$3.14 \cdot 3 \cdot 10$	$= 94.20 \text{ in}^2$
Total surface area:		122.46 in²

Find the surface area of each pyramid or cone. Round each answer to the nearest tenth, if necessary.

