

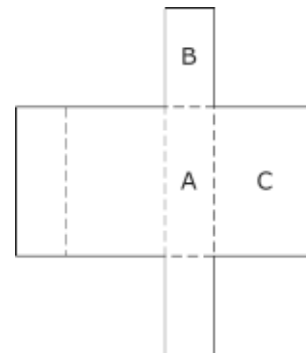
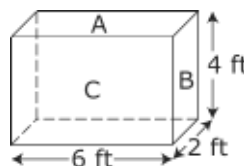
Calculating Surface Area

These pages provide extra practice for the Skills Practice on pages 256–258.

Surface area is the number of square units needed to cover the outside of an object.

Rectangular Prisms

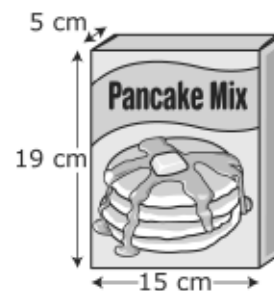
- In all rectangular prisms, the 6 sides are made up of 3 pairs of rectangles.



2-D Shape	Area $A = l \times w$	# of Matching Faces	Total Area
A. Top/Bottom	____ \times ____ = ____	2	____ \times ____ = ____ ft^2
B. Left/Right	____ \times ____ = ____		____ \times ____ = ____ ft^2
C. Front/Back	____ \times ____ = ____		____ \times ____ = ____ ft^2
Total Surface Area			

- A package of pancake mix is 19 cm by 15 cm by 5 cm.

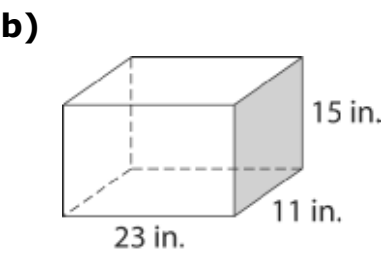
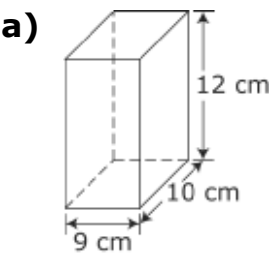
a) Sketch a net of the pancake mix box.



b) Calculate the total surface area of the box.

2-D Shape	Area	# of Matching Faces	Total Area
Total Surface Area			

3. Calculate the surface areas of the following boxes.

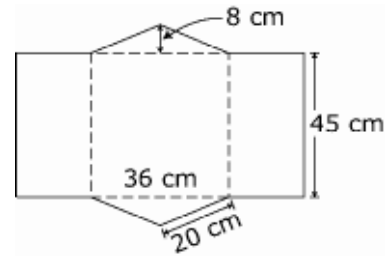
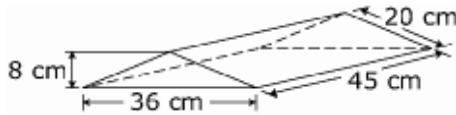


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SP BLM 14
(continued)

Triangular Prisms

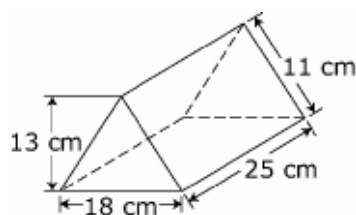
4. In triangular prisms, the triangles are matching sides.



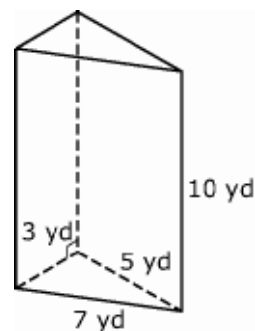
2-D Shape	Area	# of Matching Faces	Total Area
Front/Back Triangles	$A = (\text{base} \times \text{height}) \div 2$ $= (\text{ } \times \text{ }) \div 2$ $= \text{ } \text{cm}^2$		
Left/Right Rectangles	$A = l \times w$ $= \text{ }$		
Bottom Rectangle	$A = l \times w$ $= \text{ }$		
Total Surface Area			

5. Calculate the surface areas of the following triangular prisms.

a)



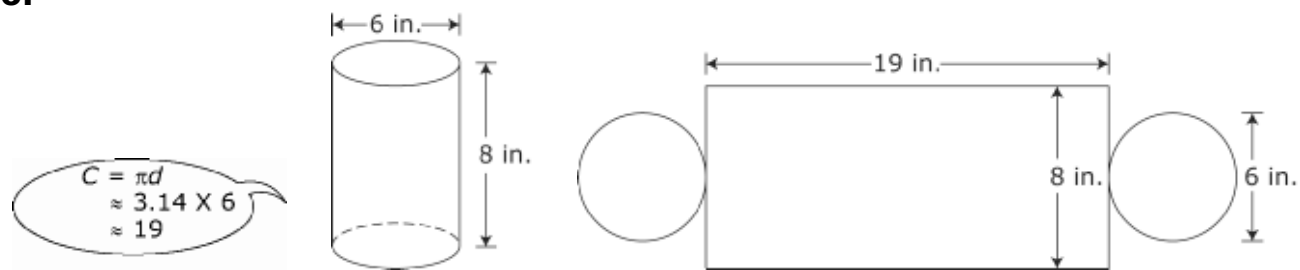
b)



Cylinders

- The top and bottom of a cylinder are circles.
- If you cut the tube from top to bottom, it unfolds to become a rectangle.
- The width of the rectangle equals the circumference of the circle.

6.



2-D Shape	Area	# of Matching Faces	Total Area
Top/Bottom Circles	$A = \pi \times r^2$ $\approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$ $\approx \underline{\hspace{1cm}} \text{ in.}^2$		
Rectangle	$A = l \times w$ $= \underline{\hspace{1cm}}$		
Total Surface Area			

7. Calculate the surface areas of the following cylinders.

