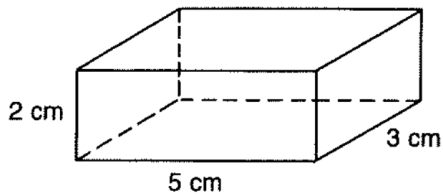


\*Surface Area of a prism is the sum of the areas of all the faces of the prism.\*

### 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:**  $2 \cdot (5 \cdot 3) = 30 \text{ cm}^2$

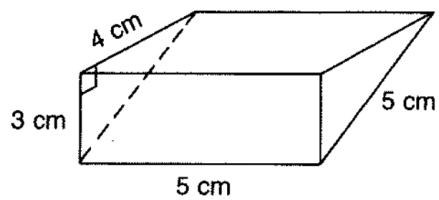
**Front and back:**  $2 \cdot (2 \cdot 5) = 20 \text{ cm}^2$

+ **Two sides:**  $2 \cdot (2 \cdot 3) = 12 \text{ cm}^2$

---

**Total surface area**  $62 \text{ cm}^2$

Triangular Prism



Area:

**Top:**  $4 \cdot 5 = 20 \text{ cm}^2$

**Front:**  $3 \cdot 5 = 15 \text{ cm}^2$

**Bottom:**  $5 \cdot 5 = 25 \text{ cm}^2$

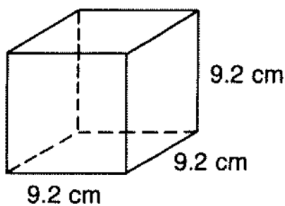
+ **Two sides:**  $2 \cdot \left(\frac{1}{2} \cdot 3 \cdot 4\right) = 12 \text{ cm}^2$

---

**Total surface area**  $72 \text{ cm}^2$

**Practice:**

(Round all answers to the tenths place.)



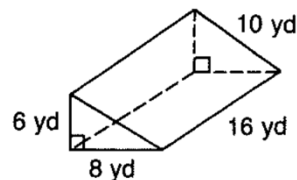
Area:

Top and Bottom:

Front and back:

Two sides:

**Total Surface Area =**



Area:

Top:

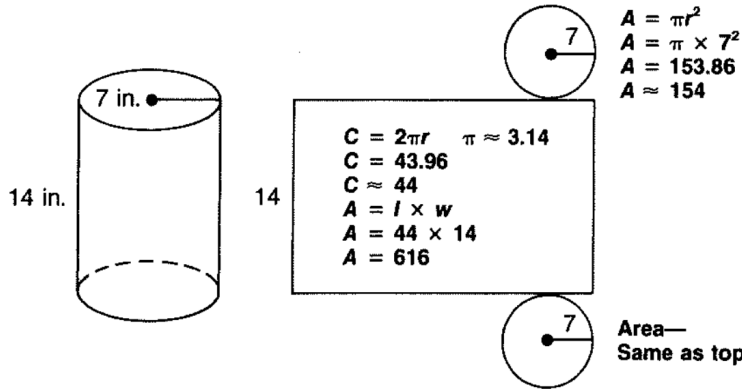
Bottom:

Back:

Two sides:

**Total Surface Area =**

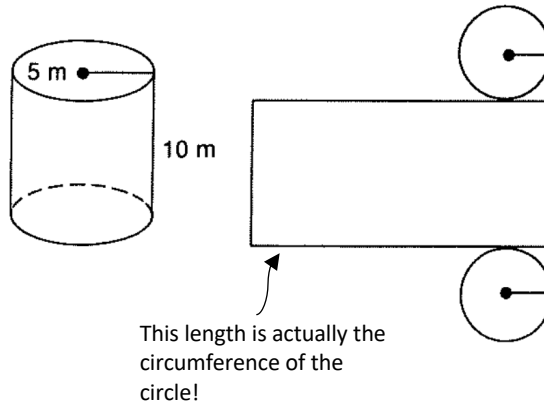
# Surface Area of Cylinders



Total surface area  
 154  
 154  
 + 616  
 about 924 square inches

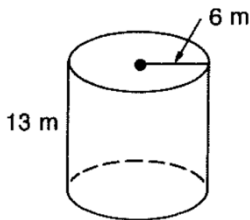
Use the figures at the right.

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.



## Practice:

(Round all answers to the tenths place.)



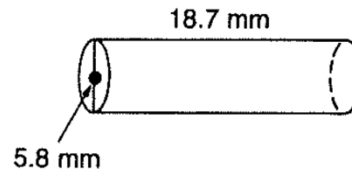
Area:

Top Circle:

Bottom Circle:

Rectangle:

Total Surface Area =



Area:

Top Circle:

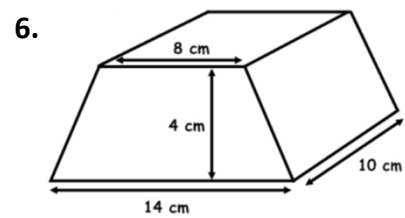
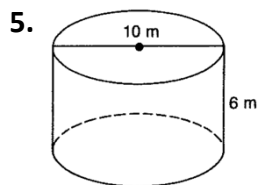
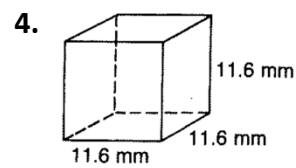
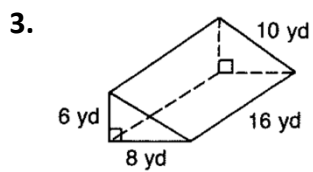
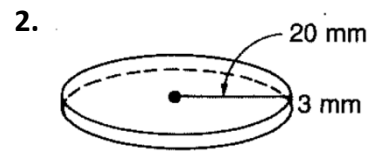
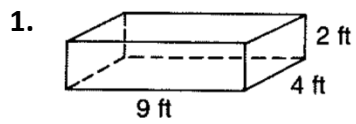
Bottom Circle:

Rectangle:

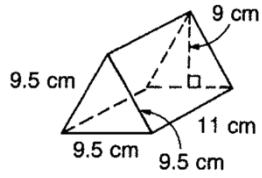
Total Surface Area =

### Surface Area of Prisms Practice:

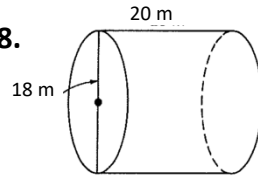
Find the surface area of each of the objects below. Use the  $\pi$  button on your calculator; round all final answers to the tenths place.



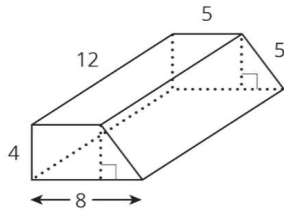
7.



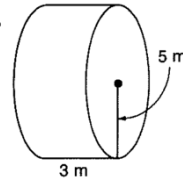
8.



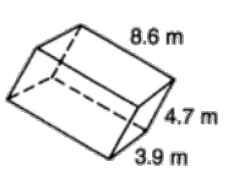
9.



10.

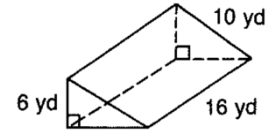


11.



12.

(This one will require some additional work to find a side length first.)



13. A triangular prism that is 11 in long, whose ends are right triangles with base = 9 in and height = 12 in.

14. A rectangular prism that whose base measures 12.5 cm by 6 cm and is 5 cm tall.