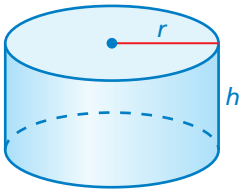
REVIEW: Surface Areas of Cylinders

Name _____

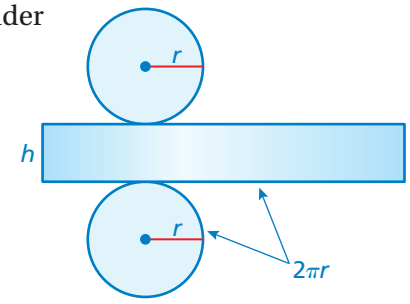
Key Concept and Vocabulary



$S = 2\pi r^2 + 2\pi rh$

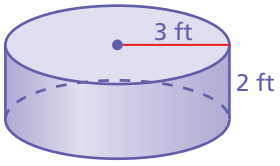
Visual Model

Net for a Cylinder



Skill Example

1.



$S = 2\pi \cdot 3^2 + 2\pi \cdot 3 \cdot 2$

$= 18\pi + 12\pi$

$= 30\pi \text{ ft}^2$

Application Example

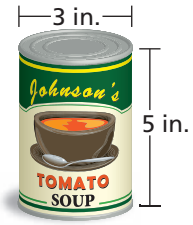
2. Find the surface area of the soup can.

$S = 2\pi \cdot 1.5^2 + 2\pi \cdot 1.5 \cdot 5$

$= 4.5\pi + 15\pi$

$= 19.5\pi$

∴ The surface area is 19.5π square inches.



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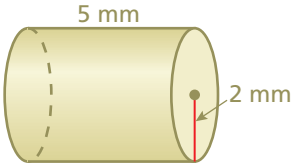
Check your answers at BigIdeasMath.com.

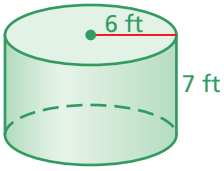
Find the surface area of the cylinder.

3.



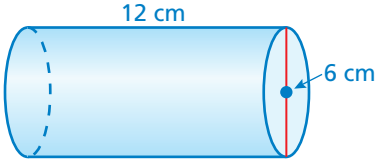
$S =$ _____

4.



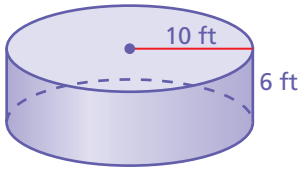
$S =$ _____

5.



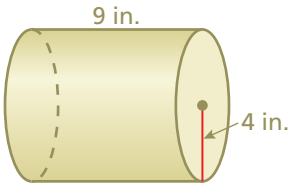
$S =$ _____

6.



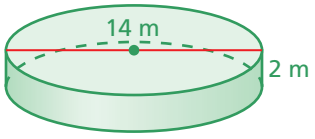
$S =$ _____

7.



$S =$ _____

8.



$S =$ _____

9. OIL TANKER TRUCK The truck's tank is a stainless steel cylinder. How many square feet of stainless steel are needed to make the tank? _____

10. OIL TANKER TRUCK What percent of the stainless steel in the tank is used to make the two ends? _____

Length = 50 ft
Radius = 4 ft