## Volume and Surface Area of Cylinders (A)

Instructions: Find the volume and surface area for each cylinder.
1)

2)

3)

4)

5)

6)


## Volume and Surface Area of Cylinders Answer (A)

Instructions: Find the volume and surface area for each cylinder.
Formula: Volume $(V)=\pi r^{2} h$, Surface Area $(A)=2 \pi r(r+h), \pi=3.14$
1)


$$
\begin{aligned}
& \mathrm{V}=3.14 \times 6.8 \times 6.8 \times 5.8=842.1 \mathrm{~cm}^{3} \\
& \mathrm{~A}=(2 \times 3.14 \times 6.8) \times(6.8+5.8)=538.1 \mathrm{~cm}^{2}
\end{aligned}
$$

3) 



$$
\begin{aligned}
& \mathrm{V}=3.14 \times 3.9 \times 3.9 \times 8.9=425.1 \mathrm{~km}^{3} \\
& \mathrm{~A}=(2 \times 3.14 \times 3.9) \times(3.9+8.9)=313.5 \mathrm{~km}^{2}
\end{aligned}
$$

5) 


1.1 m

$$
\begin{aligned}
& \mathrm{V}=3.14 \times 1.1 \times 1.1 \times 2.8=10.6 \mathrm{~m}^{3} \\
& \mathrm{~A}=(2 \times 3.14 \times 1.1) \times(1.1+2.8)=26.9 \mathrm{~m}^{2}
\end{aligned}
$$

2) 


$\mathrm{V}=3.14 \times 6.4 \times 6.4 \times 4.6=591.6 \mathrm{mi}^{3}$
$\mathrm{A}=(2 \times 3.14 \times 6.4) \times(6.4+4.6)=442.1 \mathrm{mi}^{2}$
4)

$\mathrm{V}=3.14 \times 0.5 \times 0.5 \times 2.6=2.0 \mathrm{yd}^{3}$
$\mathrm{~A}=(2 \times 3.14 \times 0.5) \times(0.5+2.6)=9.7 \mathrm{yd}^{2}$
6)


$$
\begin{aligned}
& \mathrm{V}=3.14 \times 6.2 \times 6.2 \times 4.3=519.0 \mathrm{in}^{3} \\
& \mathrm{~A}=(2 \times 3.14 \times 6.2) \times(6.2+4.3)=408.8 \mathrm{in}^{2}
\end{aligned}
$$

