## Volume and Surface Area of Rectangular Prisms

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

2)

3)

4)

5)

6)


## Volume and Surface Area of Rectangular Prisms Answer

Instructions: Find the volume and surface area for each rectangular prism.
Formula: $\operatorname{Volume}(\mathrm{V})=l w h$, Surface Area $(\mathrm{A})=2(l w+w h+l h)$
1)


$$
\begin{aligned}
& \mathrm{V}=7.9 \times 4.5 \times 4.0=142.2 \mathrm{~cm}^{3} \\
& \mathrm{~A}=2 \times((7.9 \times 4.5)+(4.5 \times 4.0)+(7.9 \times 4.0))=170.3 \mathrm{~cm}^{2}
\end{aligned}
$$

3) 



$$
\begin{aligned}
& \mathrm{V}=6.6 \times 2.0 \times 3.3=43.6 \mathrm{~km}^{3} \\
& \mathrm{~A}=2 \times((6.6 \times 2.0)+(2.0 \times 3.3)+(6.6 \times 3.3))=83.2 \mathrm{~km}^{2}
\end{aligned}
$$

## 5)



$$
\begin{aligned}
& \mathrm{V}=6.3 \times 1.8 \times 1.9=21.5 \mathrm{~m}^{3} \\
& \mathrm{~A}=2 \times((6.3 \times 1.8)+(1.8 \times 1.9)+(6.3 \times 1.9))=53.5 \mathrm{~m}^{2}
\end{aligned}
$$

2) 


$\mathrm{V}=8.0 \times 2.2 \times 5.0=88.0 \mathrm{mi}^{3}$
$\mathrm{A}=2 \mathrm{x}((8.0 \times 2.2)+(2.2 \times 5.0)+(8.0 \times 5.0))=137.2 \mathrm{mi}^{2}$
4)

$\mathrm{V}=7.1 \times 6.6 \times 7.8=365.5 \mathrm{yd}^{3}$
$\mathrm{~A}=2 \mathrm{x}((7.1 \times 6.6)+(6.6 \times 7.8)+(7.1 \times 7.8))=307.4 \mathrm{yd}^{2}$
6)


$$
\begin{aligned}
& V=6.8 \times 5.4 \times 5.9=216.6 \text { in }^{3} \\
& A=2 \times((6.8 \times 5.4)+(5.4 \times 5.9)+(6.8 \times 5.9))=217.4 \mathrm{in}^{2}
\end{aligned}
$$

