Practice (3.2)

1. Determine the volume of each cube.
a)


$$
\begin{aligned}
& V=s^{3} \\
& V=(1)^{3} \\
& V=1 \mathrm{~cm}^{3}
\end{aligned}
$$

$$
=(14)^{3}
$$

b)

$V=1953.1 \mathrm{~cm}^{3}$

$$
V=s^{3}
$$

$$
V=2744 \mathrm{~cm}^{3}
$$

c)

2. What is the volume of each right triangular prism?
a)

b)

b) $\frac{1}{2}$ full


$$
V=250 \mathrm{~cm}^{3}
$$



c)


$$
V=\frac{l w h}{2}
$$

$$
=\frac{(60)(45)(7.5)}{2}
$$

$$
V=10125 \mathrm{~cm}^{3}
$$

3. Determine the volume of the contents of each right prism.
a) $\frac{3}{4}$ full

c) $\frac{2}{5}$ full

4. What is the area of the base of each right triangular prism?

$$
V=480 \mathrm{~cm}^{3}
$$

a) volume $=90 \mathrm{~cm}^{3}$, height $=10 \mathrm{~cm}$
b) volume $=864 \mathrm{~cm}^{3}$, height $=6 \mathrm{~cm}$
C) volume $=1 \mathrm{~cm}^{3}$, height $=1 \mathrm{~cm}$
a)

$$
\begin{aligned}
V & =A_{b} h \\
\frac{90}{10} & =\frac{A_{b}(10)}{10} \\
9 c m^{2} & =A_{b}
\end{aligned}
$$

$$
\text { b) } V=A_{b} h
$$

$$
\text { c) } V=A_{b} h
$$

$$
\frac{864}{6}=\frac{A_{b}(6)}{6}
$$

$$
\frac{1}{1}=\frac{A_{b}(1)}{1}
$$

$144 \mathrm{~cm}^{2}=A_{b}$

$$
1 \mathrm{~cm}^{2}=A_{b}
$$

