Name $\qquad$ Period $\qquad$ Date $\qquad$

Answer the following. Be sure to include units. (Figures may not be drawn to scale.)

1. Given the following right triangular prism,

a) Find the missing side length of the base.
b) Find the lateral area.
c) Find the total surface area.
d) Find the volume.
2. Given the following right rectangular prism,

a) Find the lateral area. (Assume that the bases are the $4 \times 7 \mathrm{~cm}$ rectangles.)
b) Find the total surface area.
c) Find the volume.
3. Given the following right regular hexagonal prism,

a) Find the lateral area.
b) Find the total surface area.
c) Find the volume.
4. A rectangular prism with a square base has a height of 7 m and a volume of $175 \mathrm{~m}^{3}$.
a) Find the dimensions of the square base.
b) Find the lateral area.
c) Find the total surface area.
5. A rectangular prism has a square base, and the side of the square base is 3 in . If the volume of the prism is $108 \mathrm{in}^{3}$,
a) Find the height of the prism.
b) Find the lateral area.
c) Find the total surface area.
6. A cube has a lateral area of $144 \mathrm{~cm}^{2}$. Find the length of an edge.
7. A cube has a total surface area of $96 \mathrm{~m}^{2}$. Find the length of an edge.
8. A cube has a volume of $343 \mathrm{~cm}^{3}$. Find the length of an edge.
