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## 1-7 Practice

## Three-Dimensional Figures

Determine whether the solid is a polyhedron. Then identify the solid. If it is a polyhedron, name the bases, edges, and vertices.
1.

trapezoidal prism; bases: trapezoid HIJK, trapezoid LMNO; faces: trapezoid HIJK, trapezoid LMNO, $\square H K L O, \square H I N O$, $\square$ IJMN, $\square J K L M$;
edges: $\overline{H I}, \overline{I J}, \overline{J K}, \overline{H K}, \overline{H O}, \overline{O N}, \overline{I N}, \overline{K L}, \overline{L O}, \overline{L M}, \overline{J M}, \overline{M N}$;
vertices: $H, I, J, K, L, M, N$, and $O$
2.

not a polyhedron; cylinder

Find the surface area and volume of each solid to the nearest tenth.
3.

$189 \pi$ or $593.8 \mathrm{in}^{2}, 673.3 \mathrm{in}^{3}$
4.

5.

$377.0 \mathrm{~cm}^{2}, 549.8 \mathrm{~cm}^{3}$
6. COOKING A cylindrical can of soup has a height of 4 inches and a radius of 2 inches.

What is the volume of the can? Round to the nearest tenth. $50.3 \mathrm{in}^{3}$
7. BUSINESS A company needs boxes to hold a stack of 8.5 inch by 11 inch papers. If they would like the volume of the box to be 500 cubic inches, what should be the height of the box? Round to the nearest tenth. 5.3 in.

