## AutoCAD and Its Applications ADVANCED

## Exercise 2-2

See act02-02.dwg available on the companion website.

1. Begin a new drawing based on the acad3D.dwt template. Select the 3D Modeling workspace.
2. Use the current 3D viewpoint or select one using the view cube.
3. Construct the following solid primitives.

- A sphere 1.5" in diameter.
- A cone $2.5^{\prime \prime}$ high with a base diameter of $1.5^{\prime \prime}$.
- A box that is $3^{\prime \prime} \times 2^{\prime \prime} \times 1^{\prime \prime}$.
- A wedge $4^{\prime \prime}$ long, $3^{\prime \prime}$ wide, and $2^{\prime \prime}$ high.
- A cylinder $1.5^{\prime \prime}$ in diameter and $2.5^{\prime \prime}$ high.
- An elliptical cone $3^{\prime \prime}$ high with a major base diameter of $2^{\prime \prime}$ and a minor base diameter of $1^{\prime \prime}$.
- An elliptical cylinder with a major axis of $2^{\prime \prime}$, a minor axis of $1^{\prime \prime}$, and a height of $3^{\prime \prime}$.
- A basic torus with a radius of $2^{\prime \prime}$ and a tube diameter of $.75^{\prime \prime}$.
- A self-intersecting torus.
- A football-shaped torus.
- A pyramid with a base diameter of $2^{\prime \prime}$ and a height of $3^{\prime \prime}$.
- A frustum pyramid with a base diameter of $2^{\prime \prime}$, an apex diameter of $.5^{\prime \prime}$, and a height of $2.5^{\prime \prime}$.
- A polysolid $2^{\prime \prime}$ thick and $6^{\prime \prime}$ high using a variety of straight lines and curves.

4. Save your drawing as EX2-2.
