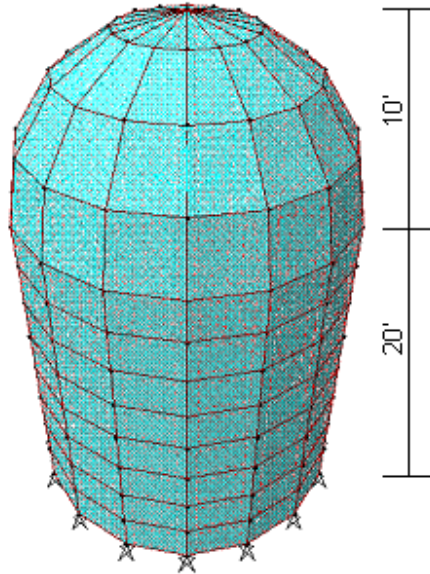


## Problem T

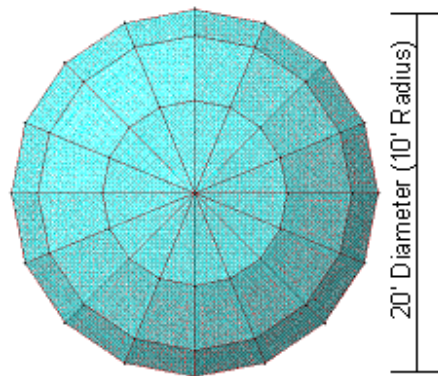
### **Domed Cylindrical Structure**

#### **To Do**

Create the model of this cylinder topped by a circular dome. Can you create this model in one minute or less?



**Three Dimensional Perspective View**



**Top View**


### **CSI Solution Demonstrates use of These Features**

- New Model From Template
- Add To Model from Template


### **Problem T Solution**

1. Click the **File menu > New Model** command to display the **New Model** form.
2. Click the drop-down box to set the units to ...



3. Click on the **Shells** button  to display the **Shells** form. In that form:
  - Select *Cylinder* in the *Shell Type* drop-down list.
  - Accept the default *Num of Divisions, Angular*, 16.
  - Type **8** in the *Number of Divisions, Z* edit box.
  - Type **20** in the *Cylinder Height* edit box.
  - Type **10** in the *Radius* edit box.
  - Click the **OK** button.
4. Click in the "X" in the upper right-hand corner of the X-Y Plane @ Z=0 window to close it.



5. Click the **Set Display Options** button  (or the **View menu > Set Display Options** command) to display the **Display Options for Active Window** form. In that form:
  - Check the *Fill Objects* box.
  - Click the **OK** button.

6. Click the **Edit menu > Add To Model From Template** command to display the **New**



**Model** form. In that form click on the **Shells** button  to display the **Shells** form. In that form:

- Select *Spherical Dome* in the *Shell Type* drop-down list.
- Accept the default *Num Divisions, Angular*, 16.
- Type **4** in the *Number of Divisions, Z* edit box.
- Type **10** in the *Radius, R* edit box.
- Accept the default *Roll Down Angle, T*, 90.
- Uncheck the *Restrains* check box if it is not already unchecked.
- Click the **Locate Origin** button to display the **Coordinate System** form.

**Note:** The **Coordinate System** form is being used to define a location of the origin of a new coordinate system and its rotation with respect to the global coordinate system. The origin point of the template will be inserted at the origin of this newly defined coordinate system.

- In the **Coordinate System** form:
  - Select the *3D* option.
  - In the *Translations* area, type **20** in the *Z* edit box.
  - Click the **OK** buttons on the **Coordinate System** and **Shell** forms to exit all forms.

7. Press the F7 key on the keyboard to toggle the grid lines off.