

```
In[1]:= Y[l_, m_,  $\theta$ _,  $\phi$ _] = SphericalHarmonicY[l, m,  $\theta$ ,  $\phi$ ]
```

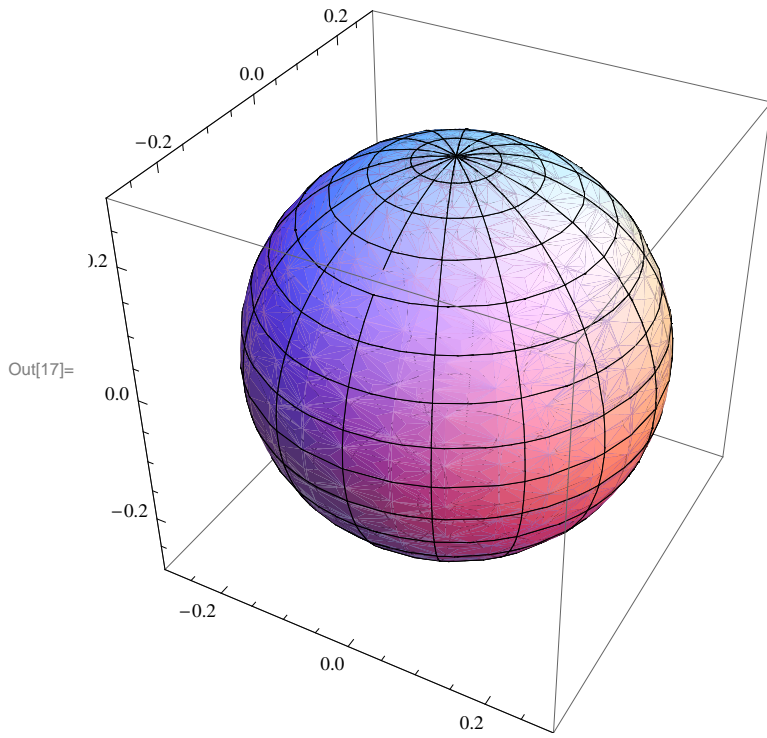
```
Out[1]= SphericalHarmonicY[1, m,  $\theta$ ,  $\phi$ ]
```

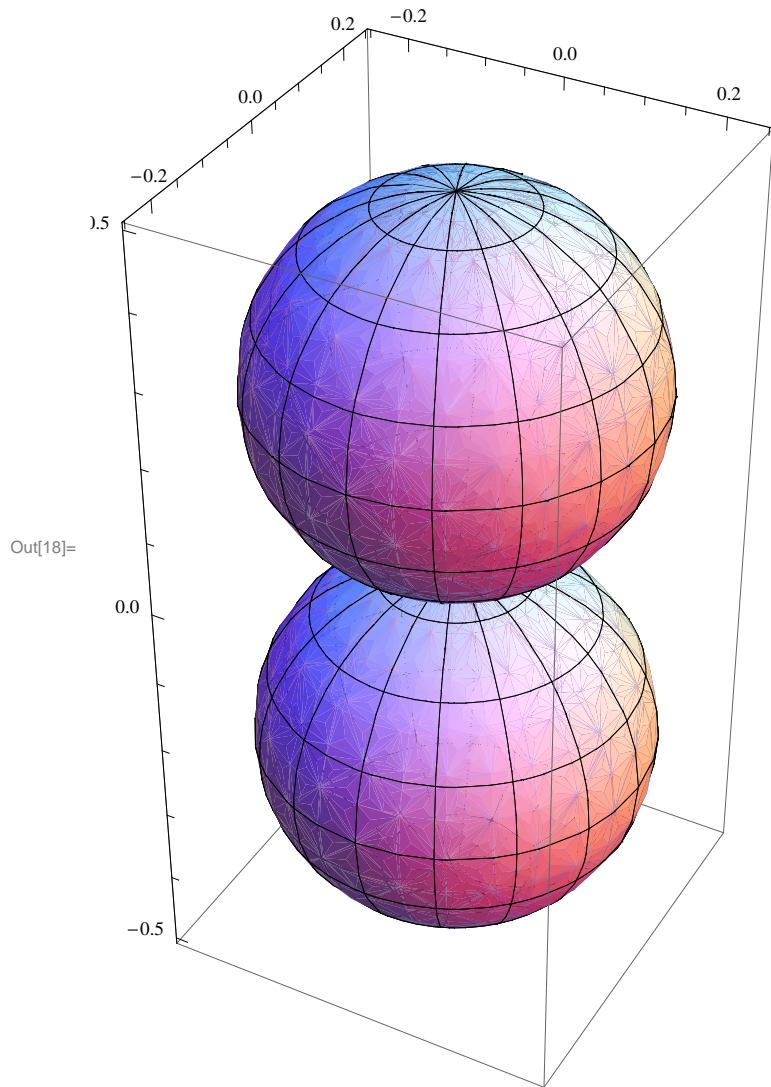
```
In[17]:=
```

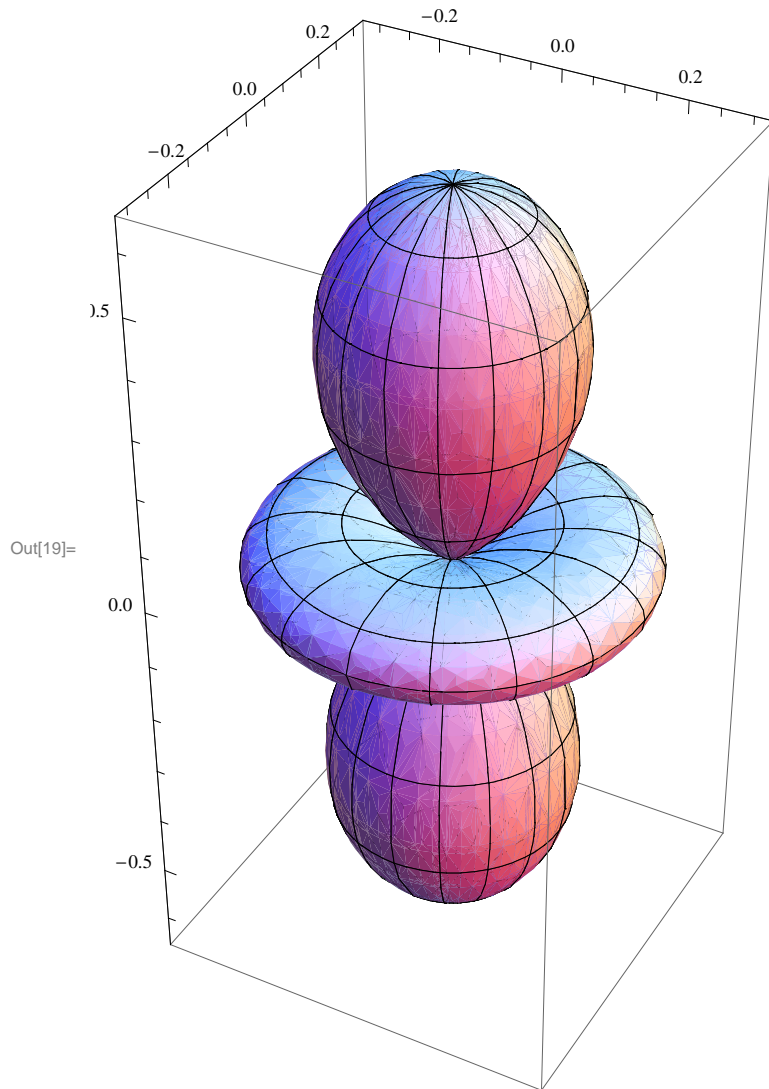
```
SphericalPlot3D[Abs[Y[0, 0,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]
```

```
SphericalPlot3D[Abs[Y[1, 0,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]
```

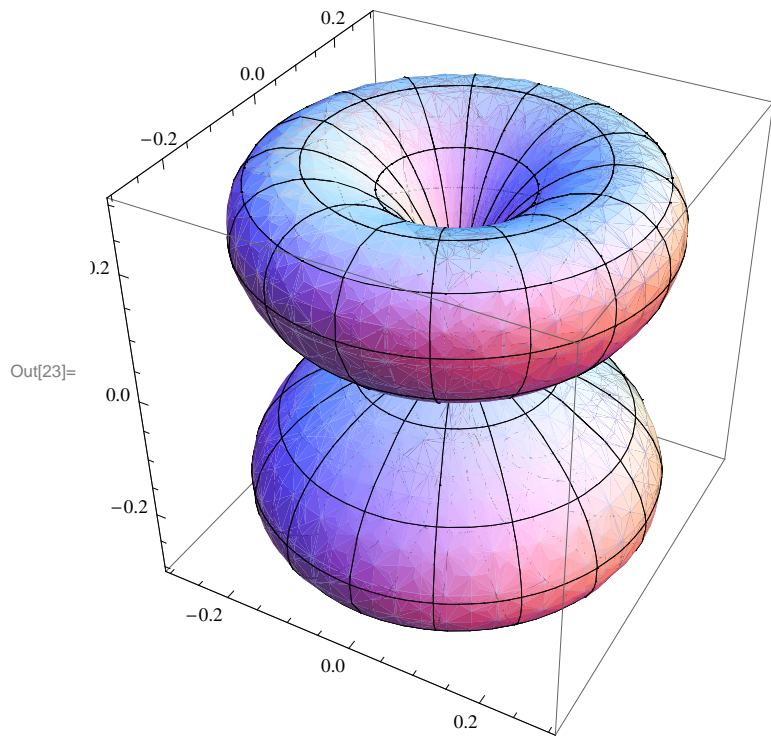
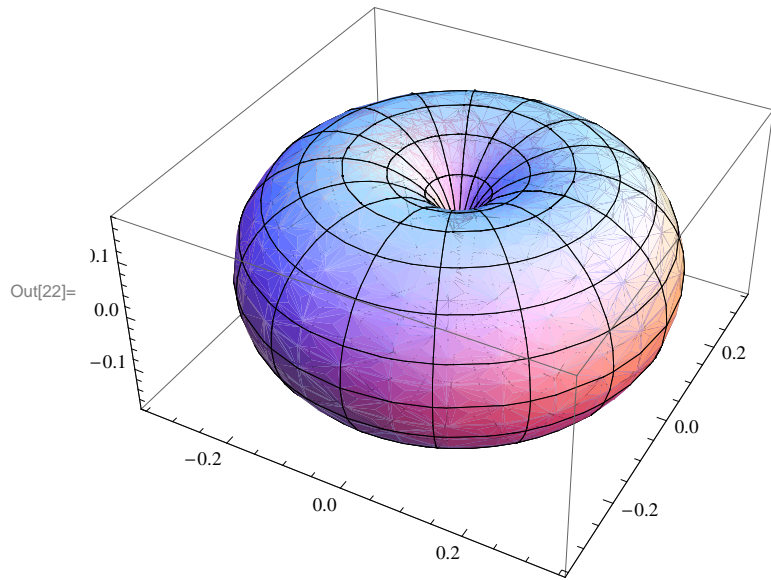
```
SphericalPlot3D[Abs[Y[2, 0,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]
```

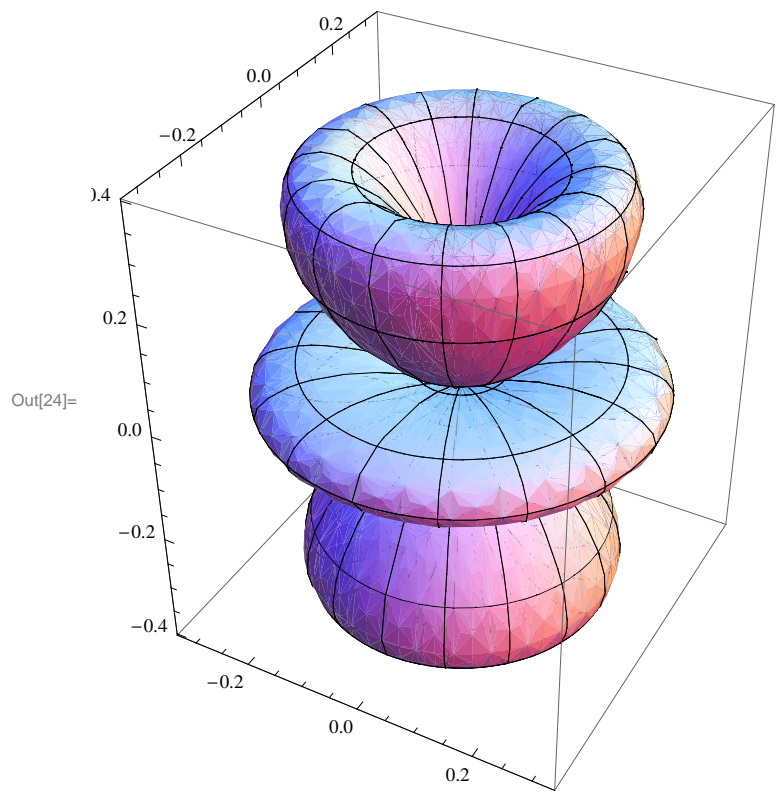




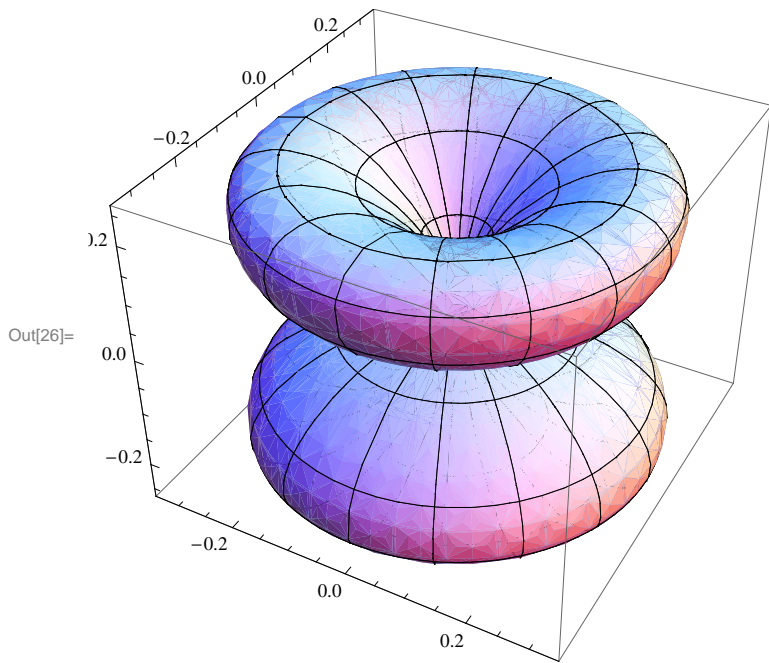
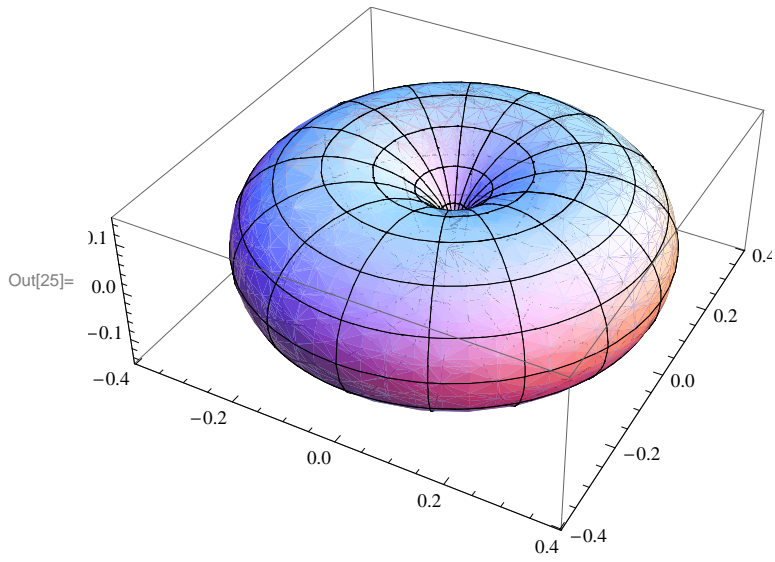


```
In[22]:= SphericalPlot3D[Abs[y[1, 1,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]  
SphericalPlot3D[Abs[y[2, 1,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]  
SphericalPlot3D[Abs[y[3, 1,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]
```





```
In[25]= SphericalPlot3D[Abs[y[2, 2,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]  
SphericalPlot3D[Abs[y[3, 2,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]
```



```
In[27]= SphericalPlot3D[Abs[y[3, 3,  $\theta$ ,  $\phi$ ]], { $\theta$ , 0,  $\pi$ }, { $\phi$ , 0,  $2\pi$ }]
```

