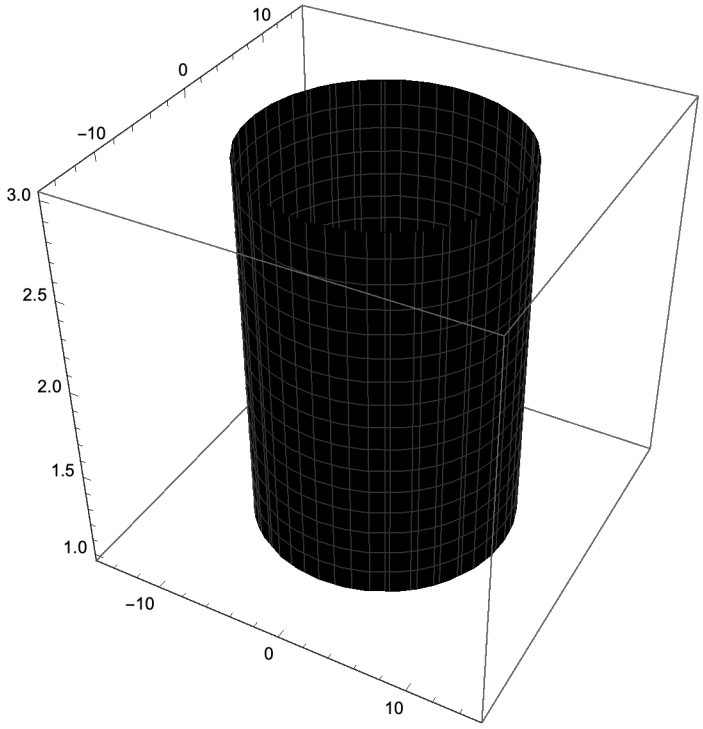
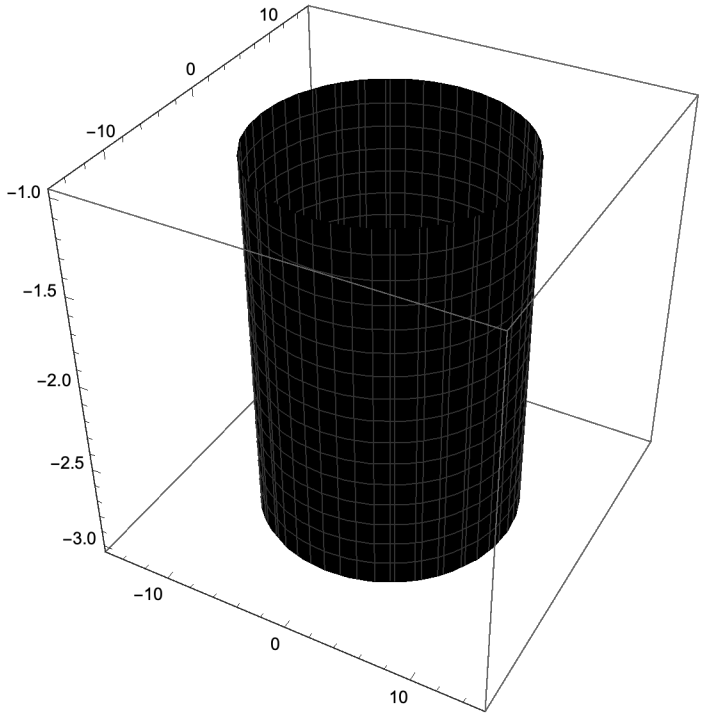
In[136]:=
```
parteSup = ContourPlot3D[x^2 + y^2 == 100,
                         representación 3D de contornos
  {x, -15, 15}, {y, -15, 15}, {z, 1, 3}, ColorFunction → GrayLevel]
                                         función de color   nivel de gris
```

Out[136]=



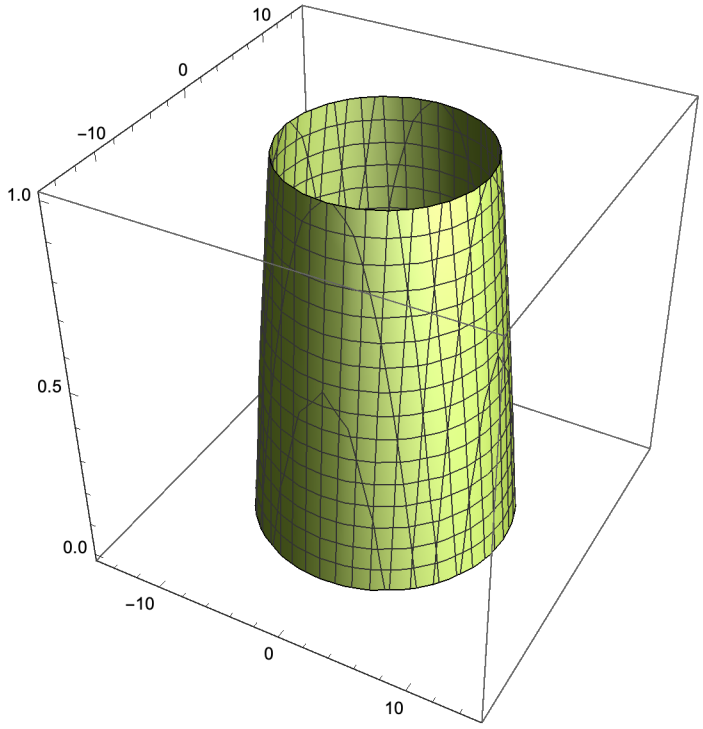
In[137]:=
```
parteInf = ContourPlot3D[x^2 + y^2 == 100,
                         representación 3D de contornos
  {x, -15, 15}, {y, -15, 15}, {z, -3, -1}, ColorFunction → GrayLevel]
                                            función de color   nivel de gris
```

Out[137]=



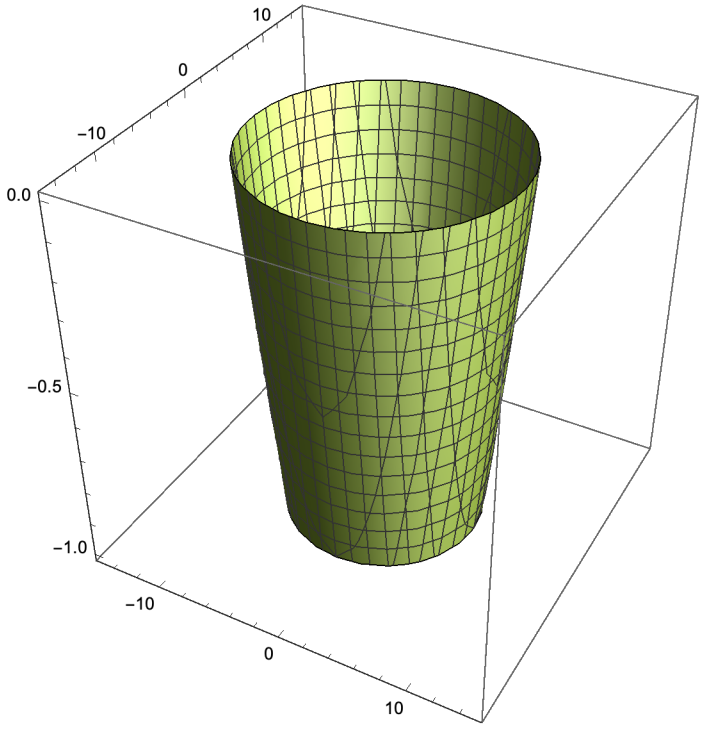
In[138]:=
```
cremaAba = ContourPlot3D[-0.0239 x^2 - 0.0239 y^2 + 2.347 == z,
```
representación 3D de contornos
```
{x, -15, 15}, {y, -15, 15}, {z, 0, 1}, ColorFunction → White]
```
función de color blanco

Out[138]=



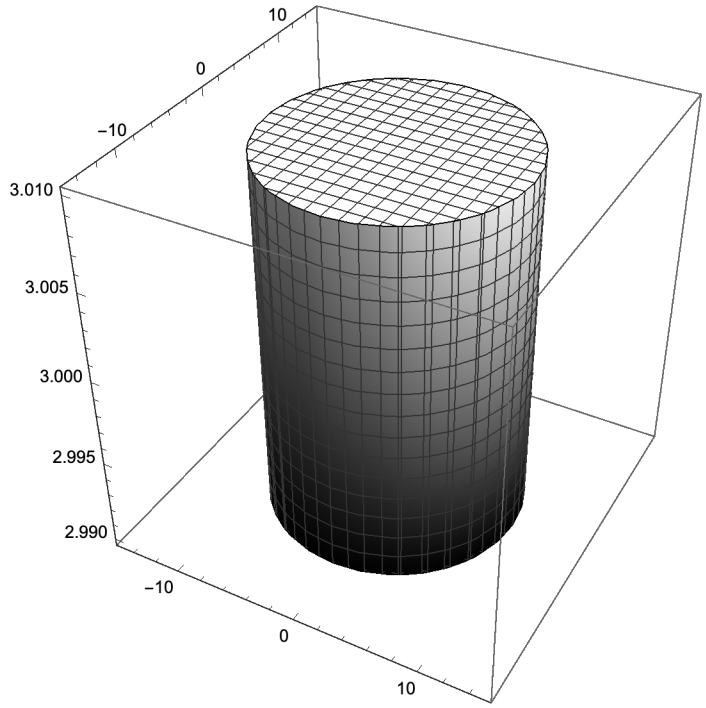
In[139]:=
```
cremaArr = ContourPlot3D[0.0228 x^2 + 0.0228 y^2 - 2.285 == z, {x, -15, 15},
                         representación 3D de contornos
  {y, -15, 15}, {z, -1, 0}, ColorFunction → RGBColor[255, 255, 255]]
                            función de color   color RGB
```

Out[139]=



In[140]:=
```
tapaSup1 = RegionPlot3D[x^2 + y^2 ≤ 100, {x, -15, 15},
                        representación de región 3D
  {y, -15, 15}, {z, 2.99, 3.01}, ColorFunction → GrayLevel]
                                   función de color   nivel de gris
```

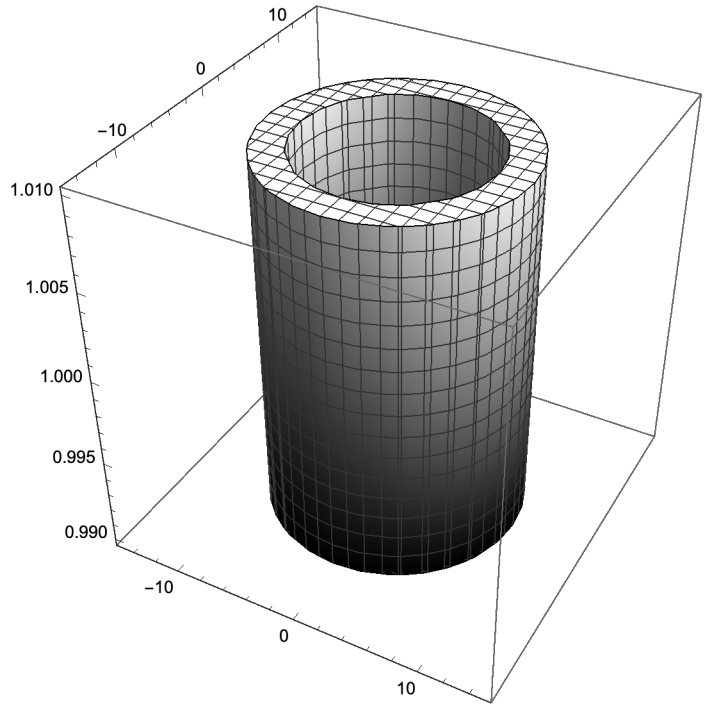
Out[140]=



In[141]:=
```
tapaSup2 = RegionPlot3D[56.25 <= x^2 + y^2 ≤ 100, {x, -15, 15},
```
representación de región 3D

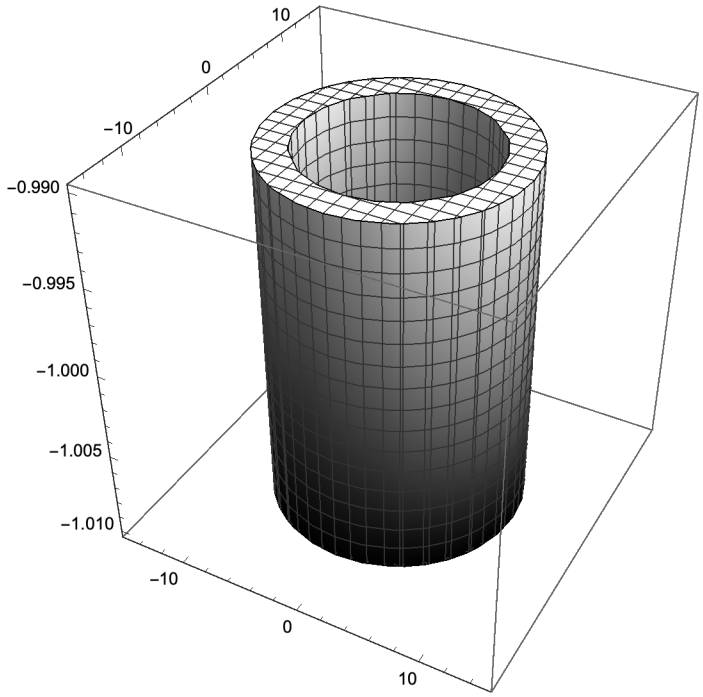
```
{y, -15, 15}, {z, 0.99, 1.01}, ColorFunction → GrayLevel]
```
función de color nivel de gris

Out[141]=



In[142]:=
```
tapaInf2 = RegionPlot3D[56.25 ≤ x^2 + y^2 ≤ 100, {x, -15, 15},
                        representación de región 3D
  {y, -15, 15}, {z, -1.01, -0.99}, ColorFunction → GrayLevel]
                                    función de color   nivel de gris
```

Out[142]=



In[143]:=
```
Show[parteInf, parteSup, cremaAba, cremaArr ,
 muestra
  tapaSup1, tapaSup2, tapaInf2, PlotRange -> All]
                                rango de repre··· todo
```

Out[143]=