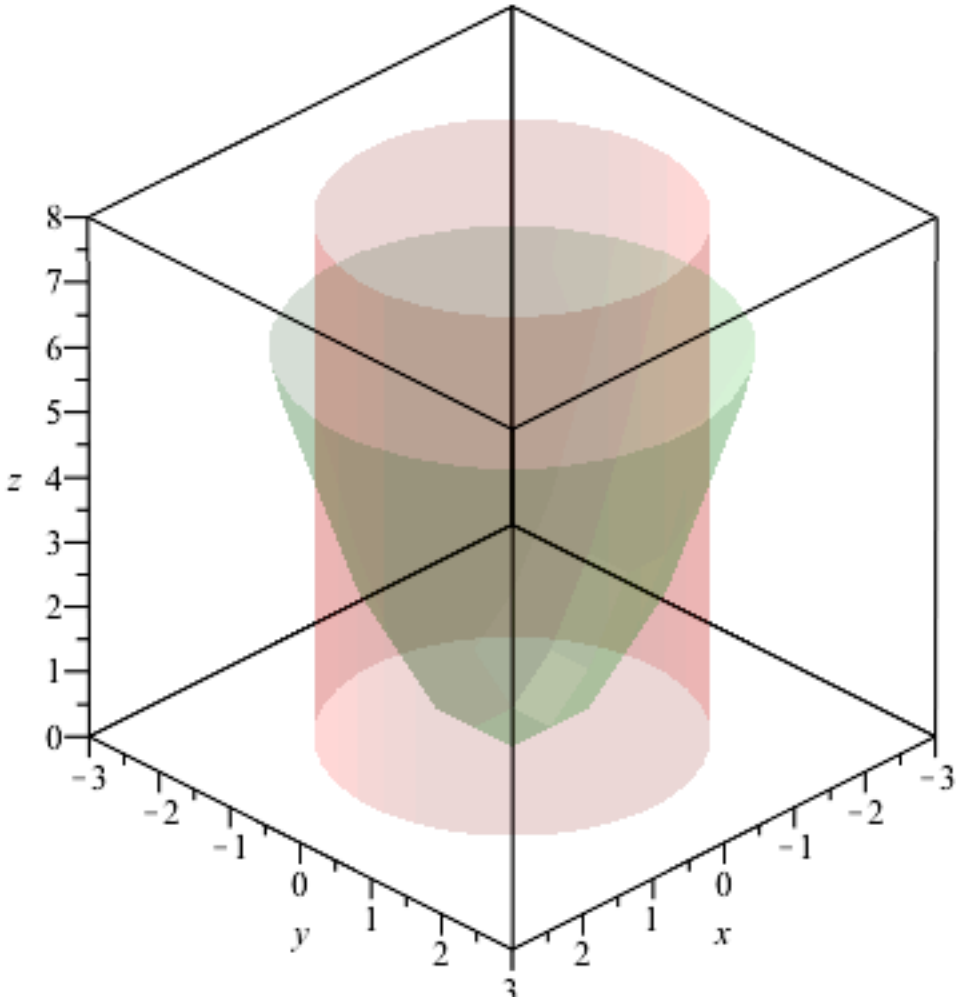
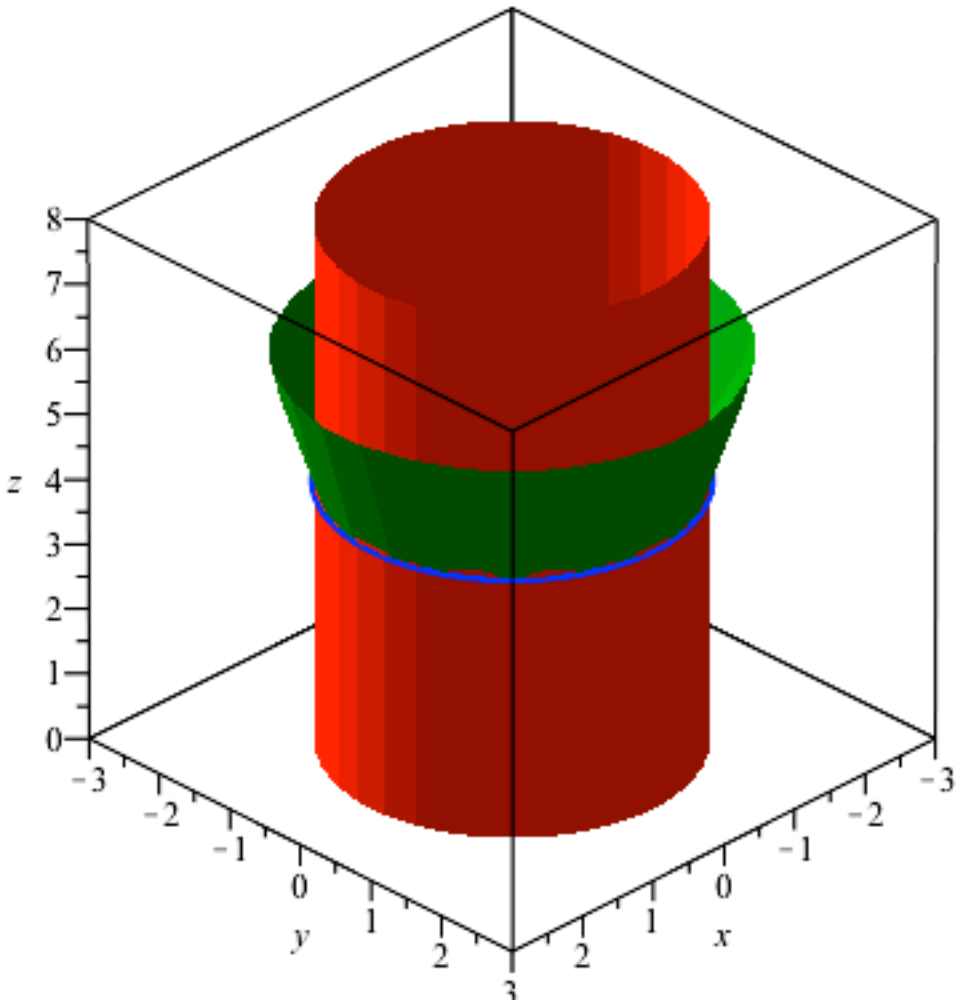
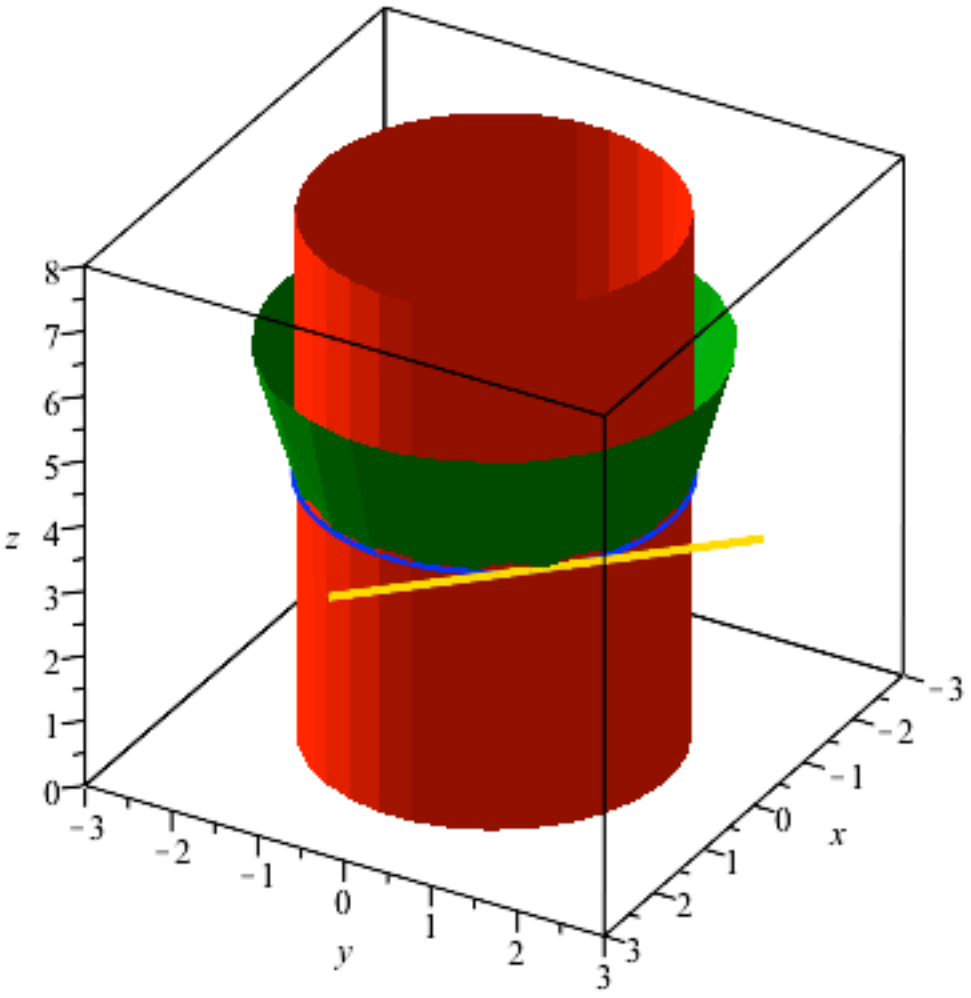
```
> with(plots):
> f := (x, y, z) → x^2 + y^2 − 4:
> g := (x, y, z) → x^2 + y^2 − z:
> Sylinder := implicitplot3d(f(x, y, z) = 0, x = −2..2, y = −2..2, z = 0..8, numpoints = 1000, style
      = patchnogrid, transparency = 0.9, color = "Red"):
> Ellipsoide := implicitplot3d(g(x, y, z) = 0, x = −3..3, y = −3..3, z = 0..6, numpoints = 1000, style
      = patchnogrid, transparency = 0.9, color = "Green"):
> display(Sylinder, Ellipsoide, view = [−3..3, −3..3, 0..8], axes = boxed, orientation = [45, 60]);
```




```
> Skjaeringskurve := spacecurve([2·cos(t), 2·sin(t), 4], t = 0..2·Pi, thickness = 3, color
      = "Blue"):
> SylinderIkkeGjennomsiktig := implicitplot3d(f(x, y, z) = 0, x = −2..2, y = −2..2, z = 0..8,
      numpoints = 1000, style = patchnogrid, color = "Red"):
> EllipsoideIkkeGjennomsiktig := implicitplot3d(g(x, y, z) = 0, x = −3..3, y = −3..3, z = 0..6,
      numpoints = 1000, style = patchnogrid, color = "Green"):
> display(SylinderIkkeGjennomsiktig, EllipsoideIkkeGjennomsiktig, Skjaeringskurve, view = [−3..3,
      −3..3, 0..8], axes = boxed, orientation = [45, 60]);
```




```
> Tangentlinje := spacecurve([sqrt(2)·(1 − 2·t), sqrt(2)·(1 + 2·t), 4], t = -2..2, color
      = "Gold", thickness = 3) :
> display(SylinderIkkeGjennomsiktig, EllipsoideIkkeGjennomsiktig, Skjaeringskurve, Tangentlinje,
      view = [-3..3, -3..3, 0..8], axes = boxed, orientation = [30, 60]);
```


8
7
6
5
4
3
2
1
0
z
−3
−2
−1
0
1
2
3
y
−3
−2
−1
0
1
2
3
x

>