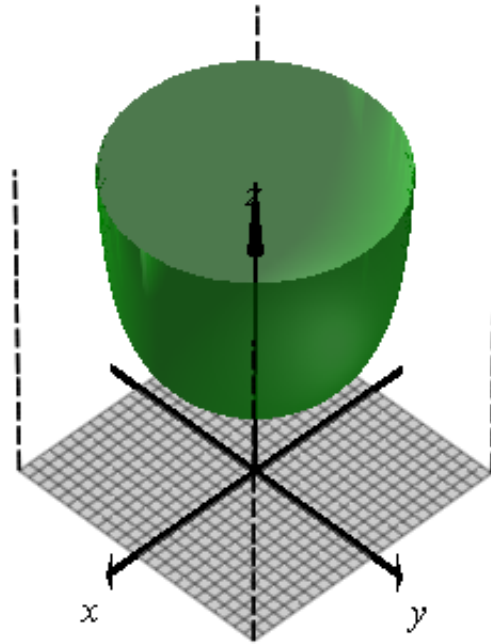


```

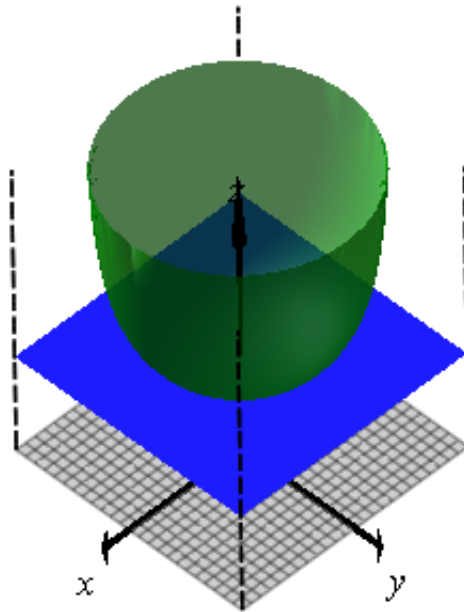
> with(plots) :
> f := (x, y) →  $\frac{1}{\sqrt{16 - x^2 - y^2}}$  :
> Flate := plot3d([x, y, f(x, y)], x=-4..4, y=-4..4, view=[-4..4, -4..4, 0..0.75], color
  = "Green", transparency=0.3, style=surface) :
> zLinje := (x, y, z0, z1) → spacecurve([x, y, t], t=z0..z1, color="Black", linestyle=dash,
  thickness=1) :
> zPlan := z → plot3d( $\left[ x, y, \frac{z \cdot 0.5}{10} + 0.25 \right]$ , x=-4..4, y=-4..4, color="Blue", style
  = patchnogrid) :
> xyProjeksjon := plot3d([x, y, 0], x=-4..4, y=-4..4, color="Grey", transparency=0.5) :
> Bakgrunnsbilde := display(Flate, xyProjeksjon, zLinje(-4, 4, 0, 0.75), zLinje(4, 4, 0, 0.75),
  zLinje(4, -4, 0, 0.75), zLinje(-4, -4, 0, 0.75), textplot3d([0.5, 0.5, 0.75, 'z'], font
  = [helvetica, 14], color="Black"), textplot3d([6, 0.5, 0, 'x'], font = [helvetica, 14], color
  = "Black"), textplot3d([0.5, 6, 0, 'y'], font = [helvetica, 14], color="Black"), arrow([0, 0,
  0], [0, 0, 15], length=0.75, color="Black", width=0.125, head_length=0.2, head_width
  =0.4), arrow([-5, 0, 0], [10, 0, 0], color="Black", width=0.025, head_length=0.2,
  head_width=0.1), arrow([0, -5, 0], [0, 10, 0], color="Black", width=0.025, head_length
  =0.2, head_width=0.1), projection=0.85) :
> display(Bakgrunnsbilde, projection=0.9, view=[-6..6, -6..6, -0.15..0.75]);

```



```
> with(plottools) :
```

```
> display(seq(display(Bakgrunnsbilde, zPlan(i)), i = 0..10), insequence = true, view = [-6..6, -6..6, -0.15..0.75]);
```



- ```

> Nivaakurve := k → implicitplot(f(x, y) = $\frac{k \cdot 0.5}{10} + 0.25$, x = -4 .. 4, y = -4 .. 4, thickness = 3, color
 = "Red", grid = [60, 60], axes = none):
> ImbeddingNede := transform((x, y) → [x, y, 0]):
> ImbeddingOppe := z → transform((x, y) → [x, y, $\frac{z \cdot 0.5}{10} + 0.25$]):
> display(seq(display(seq(ImbeddingNede(Nivaakurve(j)), j = 0 .. i),
 ImbeddingOppe(i) (Nivaakurve(i)), Bakgrunnsbilde, zPlan(i), projection = 0.9), i = 0 .. 10),
 insequence = true, view = [-6 .. 6, -6 .. 6, -0.15 .. 0.75]);

```

