

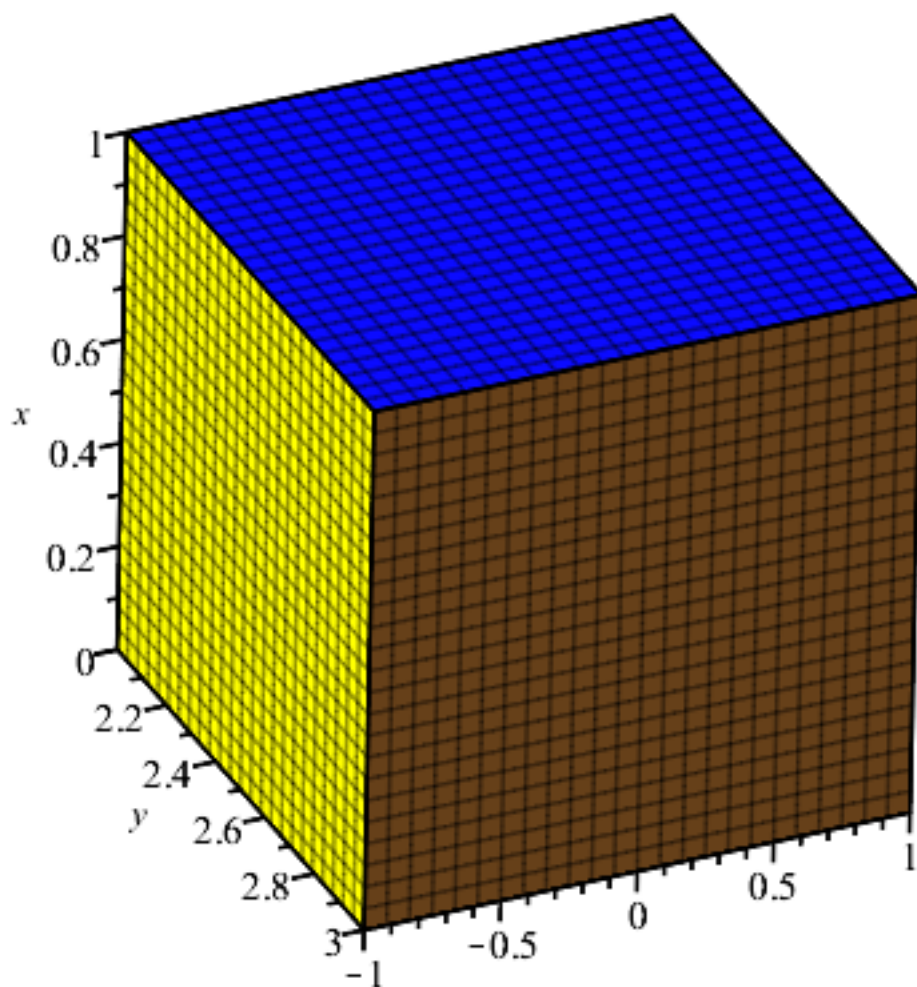
restart
with(plots) :

```
plot3D := proc(R :: Vector[column], VAR :: list, FARVE :: list)  
  local P1, P2, P3, P4, P5, P6 :  
  P1 := plot3d(subs(u = VAR[1], R), v = VAR[3]..VAR[4], w = VAR[5]..VAR[6], color  
    = FARVE[1]) :  
  P2 := plot3d(subs(u = VAR[2], R), v = VAR[3]..VAR[4], w = VAR[5]..VAR[6], color  
    = FARVE[2]) :  
  P3 := plot3d(subs(v = VAR[3], R), u = VAR[1]..VAR[2], w = VAR[5]..VAR[6], color  
    = FARVE[3]) :  
  P4 := plot3d(subs(v = VAR[4], R), u = VAR[1]..VAR[2], w = VAR[5]..VAR[6], color  
    = FARVE[4]) :  
  P5 := plot3d(subs(w = VAR[5], R), u = VAR[1]..VAR[2], v = VAR[3]..VAR[4], color  
    = FARVE[5]) :  
  P6 := plot3d(subs(w = VAR[6], R), u = VAR[1]..VAR[2], v = VAR[3]..VAR[4], color  
    = FARVE[6]) :  
  return plots[display](P1, P2, P3, P4, P5, P6) :  
end proc:
```

▼ Eksempel 1

Forskiften for parametriseringen angives som "expression", parameterområderne som "list" og farverne som "list":

```
R := <u, v, w> :  
INT := [0, 1, 2, 3, -1, 1] :  
FAR := [red, blue, green, gold, yellow, gray] :  
display(plot3D(R, INT, FAR), labels = [x, y, z], axes = boxed)
```



▼ Eksempel 2

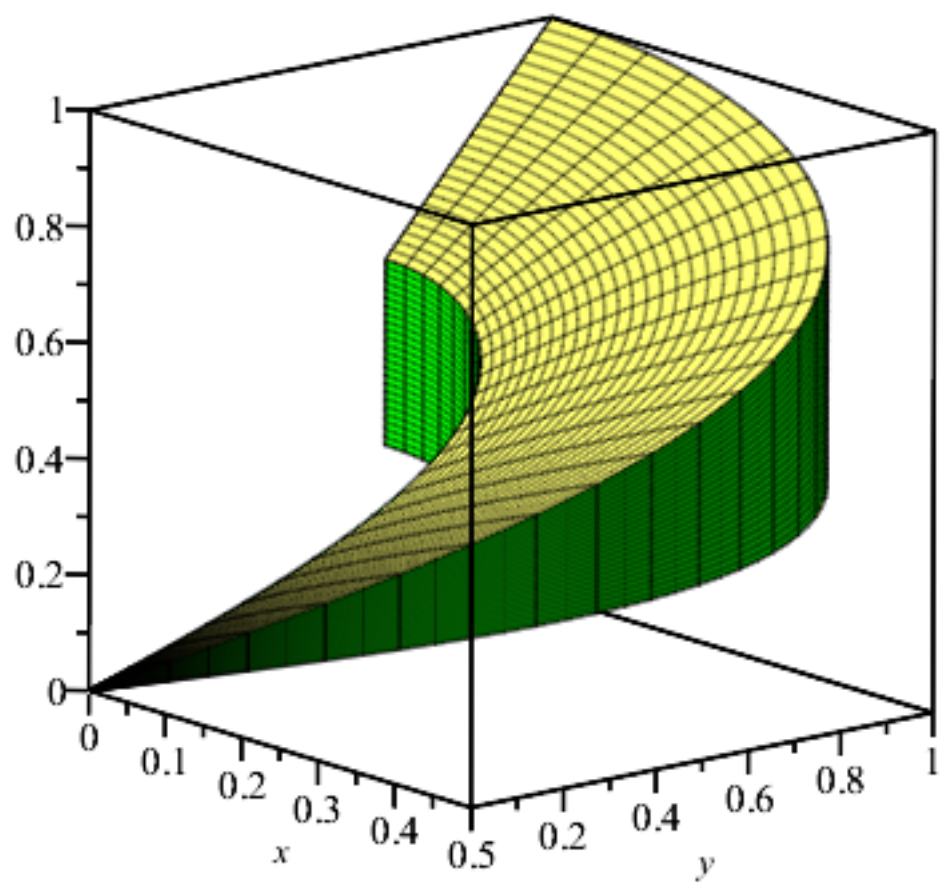
Forskiften for parametriseringen angives som "expression", parameterområderne som "list" og farverne som "list":

$$R := \left\langle v^4 \cdot \sin(u) \cdot \cos(u), v^2 \cdot \cos(u), \frac{1}{2} \cdot v^2 \cdot \cos(u) + \frac{1}{2} \cdot w \cdot v^2 \cdot \cos(u) \right\rangle :$$

$$INT := \left[0, \frac{\pi}{2}, \frac{4}{5}, 1, 0, 1 \right] :$$

$$FAR := [red, red, green, green, yellow, yellow] :$$

$$display(plot3D(R, INT, FAR), labels = [x, y, z], axes = boxed)$$



NB: Figuren har kun 5 flader, da $v = 0$ kun giver et punkt.