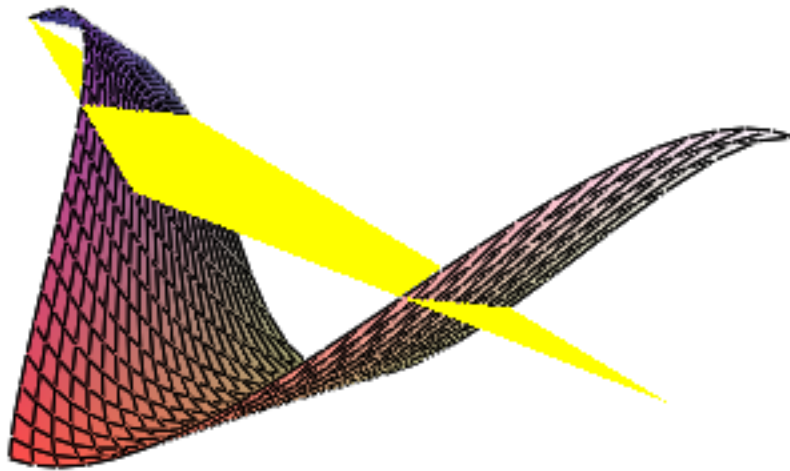


```

fubiniRG := proc(f, a, b, x1, x2)
  local a1, a2 :
  a1 := plot3d(f, x = a .. b, y = x1 .. x2) :
  a2 := plot3d( [x, y, 0], x = a .. b, y = x1 .. x2, color = yellow, style = patchngrid) :
  display(a1, a2)
  end proc:
with(plots) :
fubiniRG(x·cos(x + y), 0, Pi, 0, x)

```



```

fubiniCG := proc(f, a, b, x1, x2)
  Integrate(Integrate(f, y = x1 .. x2), x = a .. b) = integrate(integrate(f, y = x1 .. x2), x = a .. b)
  end proc:
fubiniCG(x·cos(x + y), 0, Pi, 0, x)

```

$$\int_0^{\pi} \int_0^x x \cos(x+y) \, dy \, dx = -\frac{3}{2} \pi$$

(1)