

```
> with(plots);
[Interactive, animate, animate3d, animatecurve, arrow, changecoords, complexplot, complexplot3d, (1)
conformal, conformal3d, contourplot, contourplot3d, coordplot, coordplot3d, cylinderplot,
densityplot, display, display3d, fieldplot, fieldplot3d, gradplot, gradplot3d, graphplot3d,
implicitplot, implicitplot3d, inequal, interactive, interactiveparams, listcontplot, listcontplot3d,
listdensityplot, listplot, listplot3d, loglogplot, logplot, matrixplot, multiple, odeplot, pareto,
plotcompare, pointplot, pointplot3d, polarplot, polygonplot, polygonplot3d,
polyhedra_supported, polyhedraplot, replot, rootlocus, semilogplot, setoptions, setoptions3d,
spacecurve, sparsematrixplot, sphereplot, surfdata, textplot, textplot3d, tubeplot]
```

```
> sigma2q:=0.3;
                                 $\sigma_{2q} := 0.3$  (2)
```

```
> h1:=(x1,x2)->exp(-((x1-0.0)^2+(x2-0.0)^2)/sigma2q): #
Basisfunktionen  $h_i(x_1, x_2)$  der Repräsentanten
```

```
> h2:=(x1,x2)->exp(-((x1-1.0)^2+(x2-0.0)^2)/sigma2q):
```

```
> h3:=(x1,x2)->exp(-((x1-0.0)^2+(x2-1.0)^2)/sigma2q):
```

```
> h4:=(x1,x2)->exp(-((x1-1.0)^2+(x2-1.0)^2)/sigma2q);
```

$$h4 := (x1, x2) \rightarrow e^{-\left(\frac{(x1-1.0)^2 + (x2-1.0)^2}{\sigma_{2q}}\right)} \quad (3)$$

```
> v1:=0.0: # Werte der Repräsentanten
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```
v2:=1.0:
```

```
v3:=1.0:
```

```
v4:=0.0;
```

$$v4 := 0. \quad (4)$$

```
> zaehler:=(x1,x2)->(v1*h1(x1,x2)+v2*h2(x1,x2)+v3*h3(x1,x2)+v4*h4
(x1,x2));
```

$$zaehler := (x1, x2) \rightarrow v1 h1(x1, x2) + v2 h2(x1, x2) + v3 h3(x1, x2) + v4 h4(x1, x2) \quad (5)$$

```
> nenner:=(x1,x2)->(h1(x1,x2)+h2(x1,x2)+h3(x1,x2)+h4(x1,x2));
```

$$nenner := (x1, x2) \rightarrow h1(x1, x2) + h2(x1, x2) + h3(x1, x2) + h4(x1, x2) \quad (6)$$

```
> RB:=(x1,x2)->zaehler(x1,x2)/nenner(x1,x2);
```

$$RB := (x1, x2) \rightarrow \frac{zaehler(x1, x2)}{nenner(x1, x2)} \quad (7)$$

```
> plot3d(RB(i1,i2), i1=0..1, i2=0..1, axes=boxed, style=patch,
shading=zhue);
```

