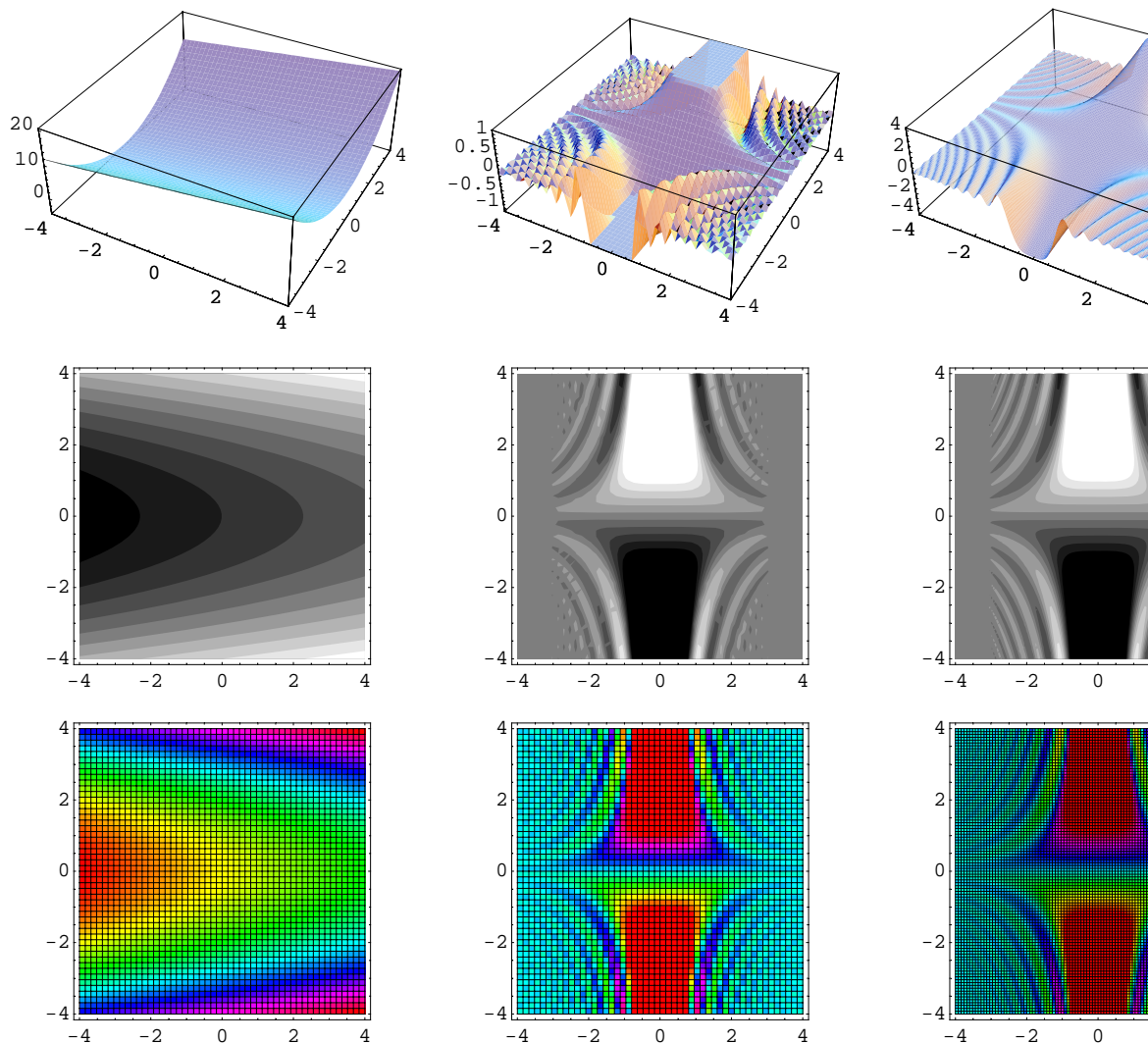
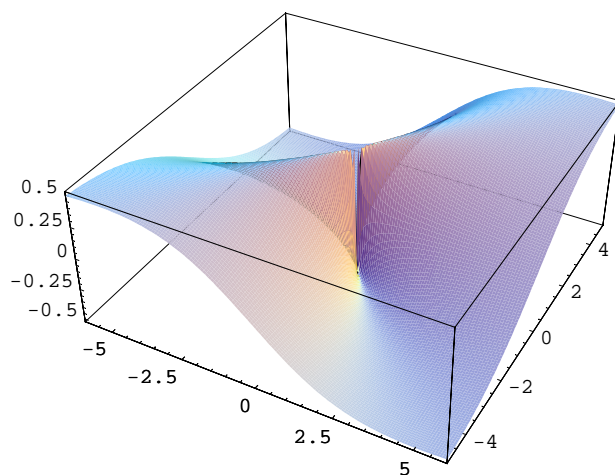


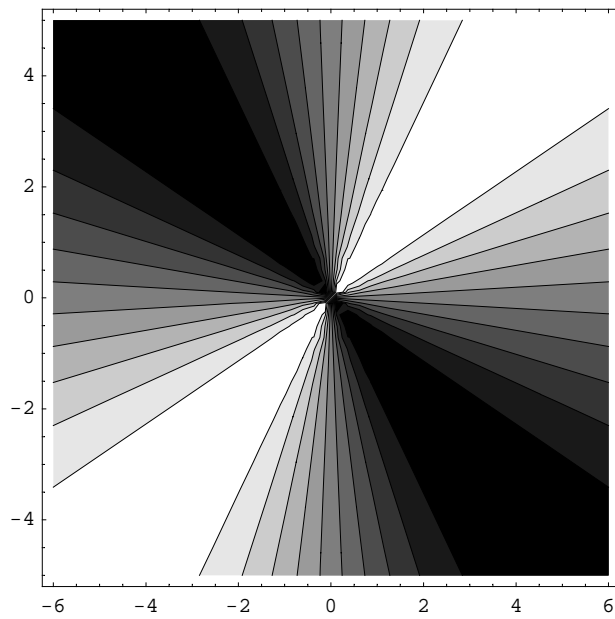
```
In[89]:= (*****  
(***** kétváltozós függvények *****)  
(*****  
  
f = x + y2;  
g =  $\frac{\text{Sin}[x^2 y]}{x^2}$ ;  
(*f fgv ábrázolása*)  
p1 = Plot3D[f, {x, -4, 4}, {y, -4, 4},  
  PlotPoints → 50, Mesh → False, DisplayFunction → Identity];  
(*g fgv ábrázolása*)  
p2 = Plot3D[g, {x, -4, 4}, {y, -4, 4},  
  PlotPoints → 50, Mesh → False, DisplayFunction → Identity];  
(* ugyanezt sűrűbben*)  
p3 = Plot3D[g, {x, -4, 4}, {y, -4, 4}, PlotPoints → 150,  
  Mesh → False, PlotRange → All, DisplayFunction → Identity];  
p4 = ContourPlot[f, {x, -4, 4}, {y, -4, 4}, PlotPoints → 50,  
  ContourLines → False, DisplayFunction → Identity];  
p5 = ContourPlot[g, {x, -4, 4}, {y, -4, 4}, PlotPoints → 50,  
  ContourLines → False, DisplayFunction → Identity];  
p6 = ContourPlot[g, {x, -4, 4}, {y, -4, 4}, PlotPoints → 150,  
  ContourLines → False, DisplayFunction → Identity];  
p7 = DensityPlot[f, {x, -4, 4}, {y, -4, 4}, PlotPoints → 50,  
  ColorFunction → Hue, DisplayFunction → Identity];  
p8 = DensityPlot[g, {x, -4, 4}, {y, -4, 4}, PlotPoints → 50,  
  ColorFunction → Hue, DisplayFunction → Identity];  
p9 = DensityPlot[g, {x, -4, 4}, {y, -4, 4}, PlotPoints → 100,  
  ColorFunction → Hue, DisplayFunction → Identity];  
Show[GraphicsArray[{{p1, p2, p3}, {p4, p5, p6}, {p7, p8, p9}}],  
  DisplayFunction → $DisplayFunction]
```



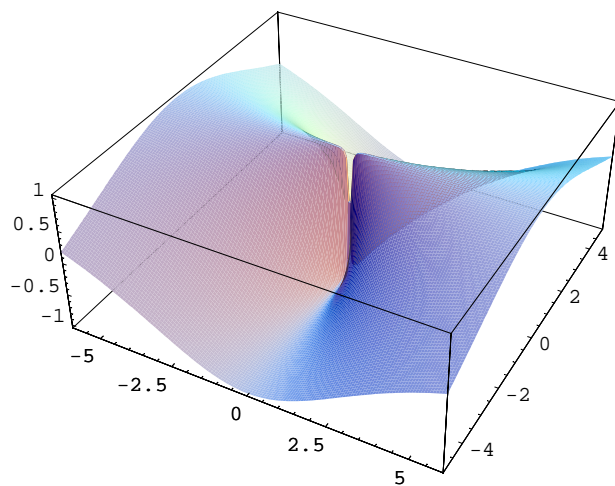
Out[96]= - GraphicsArray -

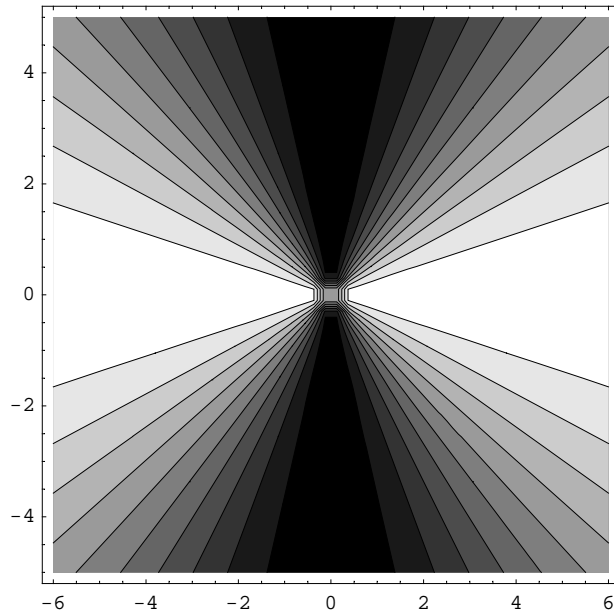
```
In[97]:= (*****)
h = (x*y) / (x^2 + y^2);
Plot3D[h, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 150, Mesh -> False];
ContourPlot[h, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 50, Contours -> 10];
```



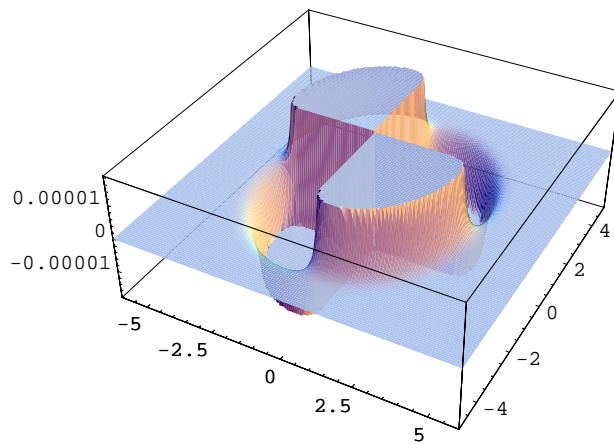


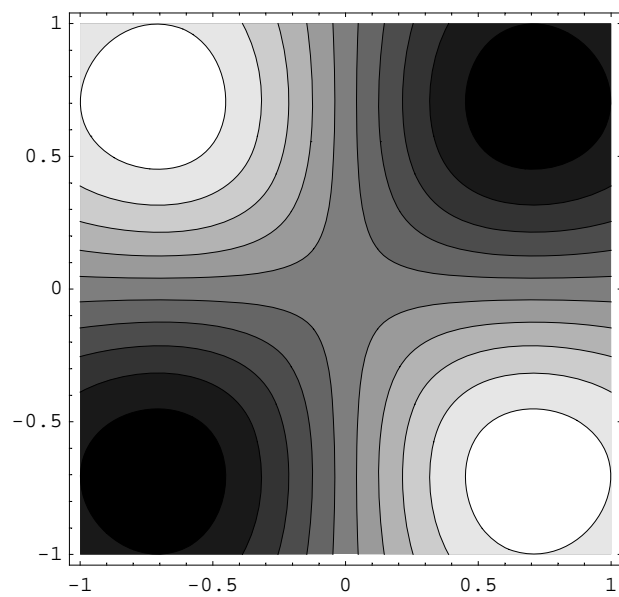
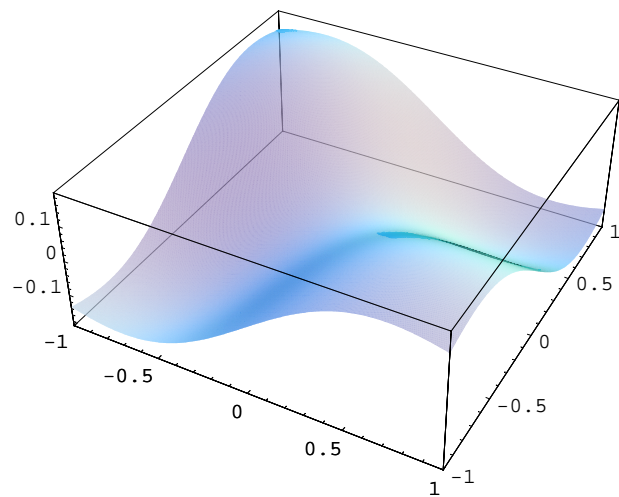
```
In[100]:= (*****)  
i = (x^2 - y^2) / (x^2 + y^2);  
Plot3D[i, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 150, Mesh -> False];  
ContourPlot[i, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 50, Contours -> 10];
```





```
(*****)  
k = -x*y*Exp[-x^2 - y^2];  
Plot3D[k, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 150, Mesh -> False];  
(*csak a közepét, ha ábrázoljuk*)  
Plot3D[k, {x, -1, 1}, {y, -1, 1}, PlotPoints -> 500, Mesh -> False];  
ContourPlot[k, {x, -1, 1}, {y, -1, 1}, PlotPoints -> 100, Contours -> 10];
```





```
(*****)
m = -3 x / (x^2 + y^2 + 1);
Plot3D[m, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 150, Mesh -> False];
ContourPlot[m, {x, -6, 6}, {y, -5, 5}, PlotPoints -> 100, Contours -> 10];
(*csak a közepét, ha ábrázoljuk*)
Plot3D[m, {x, -1, 1}, {y, -1, 1}, PlotPoints -> 500, Mesh -> False];
ContourPlot[m, {x, -1, 1}, {y, -1, 1}, PlotPoints -> 100, Contours -> 10];
```

