

## 純量函數的梯度向量場 (Gradient Vector Field of a Scalar Function)

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(以下指令來源: “Matlab 程式設計, 洪維恩, 旗標”)

```
>> [xx,yy,zz]=peaks(32); % size: 32*32, 若 [xx,yy,zz]=peaks; 則 size: 49*49  
>> figure; surf(xx,yy,zz)
```

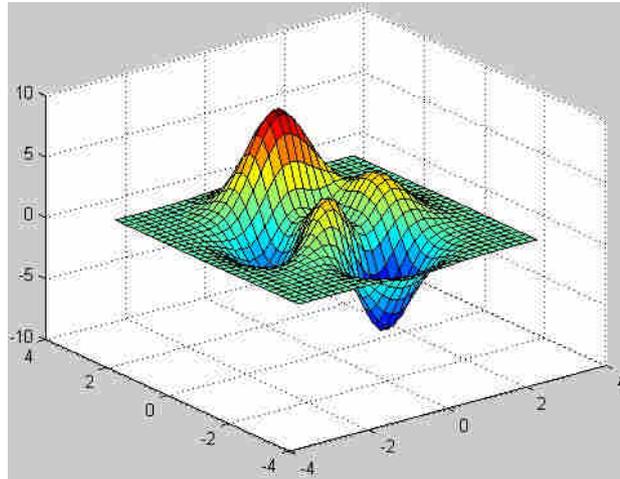
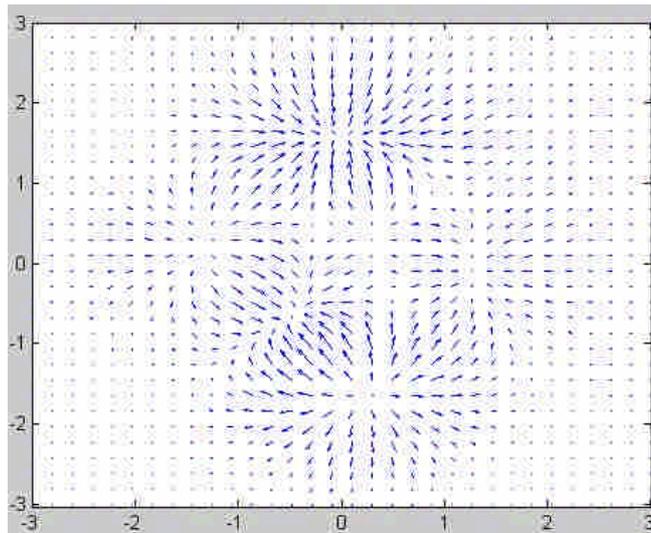


Fig. Peaks (Matlab built-in function)

```
>> [u,v]=gradient(zz);  
>> figure; quiver(xx,yy,u,v); axis tight;
```



```
>> hold on; contour(xx,yy,zz); hold off;
```

