

```
syms x y
>> f=cos(x)*exp(x-y^2)
```

f =

$\exp(-y^2 + x) \cdot \cos(x)$

```
>> ezsurf(f)
>> ezsurf(f,[-2,2,-2,2])
```

```
syms x y
```

```
>> f=inline('x.*y-(x.^3)/3','x','y')
```

f =

Inline function:
 $f(x,y) = x \cdot y - (x.^3)/3$

```
>> fx=inline('y-x.^2','x','y')
```

fx =

Inline function:
 $fx(x,y) = y - x.^2$

```
>> fy=inline('x','x','y')
```

fy =

Inline function:
 $fy(x,y) = x$

```
>> x=-2:.05:2; y=x;
>> [X,Y]=meshgrid(x,y);
>> Z=f(X,Y);
>> levels=[-6:.5:6];
>> contour(X,Y,Z,levels)
>> hold on
>> xx=-2:.2:2; yy=xx;
>> [XX,YY]=meshgrid(xx,yy);
>> U=fx(XX,YY); V=fy(XX,YY);
>> quiver(XX,YY,U,V)
>> axis equal
>> hold off
>>
```

```
syms x y
```

```
>> f=inline('(1-y.^2).*cos(x)','x','y')
```

f =

Inline function:

$f(x,y) = (1-y.^2).*\cos(x)$

```
>> ezsurf(f,[-1,1,-1,1])
```

```
>> hold on
```

```
>> l=inline('.8233-.1699*(x-.2)+.7841*(y+.4)','x','y')
```

l =

Inline function:

$l(x,y) = .8233-.1699*(x-.2)+.7841*(y+.4)$

```
>> qsurf(l,[-.3,.7,-.9,.1],10)
```

```
>> hold off
```

```
>>
```