More about the gradient vector
The social valued.
Then Sps
$$f: IR^n \rightarrow IR$$
 is diffille. The direction of
traviting from \bar{a}
maximum change of f_{μ} is given by the
durection of the gradicut vector $D(a)$.
Further, the value of the maximum
rate of change is given by $IDf(I. (T.e.)$
max value $D_{\nu}f$ can take is $I\nabla f(I.)$
Ex. $f(x,y) = x^2 + y^2$. What is direction of steepest
increase, starting from $(0,1)$ in domain?
 $f(x,y) = (2x, 2y)$
 $\forall f(0,1) = (0,2)$

et steepest increase.

