

$$J(f;x)=J(f_1,...,\textcolor{blue}{f_n};x_1,...,x_n):=\left|\begin{array}{ccc}\frac{\partial f_1}{\partial x_1}&\cdots&\frac{\partial f_n}{\partial x_1}\\\cdots&\cdots&\cdots\\\frac{\partial f_1}{\partial x_n}&\cdots&\frac{\partial f_n}{\partial x_n}\end{array}\right|\in^*=\backslash\{0\}.$$