

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