

$$\leq \frac{1}{\sqrt{\pi}} \left(\frac{1}{\sqrt{\pi}} + \frac{1}{\sqrt{\pi}} \right) = \frac{2}{\sqrt{\pi}}$$

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

$$\leq \frac{1}{\sqrt{n}} \sum_{j=1}^n \left| \frac{\partial f_j}{\partial x_i}(x) \right|$$

[illegible]

[illegible]

$$\leq \frac{1}{\epsilon} \left(\frac{\epsilon}{2} + \frac{\epsilon^2}{8} \right) = \frac{\epsilon}{2} + \frac{\epsilon^2}{8}$$