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5.1.   (a) Let $f \in C^3(\mathbb{R})$. If $0 < f'(x)$, $0 < f''(x)$, $0 < f'''(x) \leq f(x)$, then $f'(x) \leq 2f(x)$.

   (b) Let $f \in C^2(\mathbb{R})$. If $f''(x) \geq f(x)$, then $f(x) \geq f(0)\cosh x + f'(0)\sinh x$.

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Holder, minkowski interpolation fourier transform, divide and conquer