

(3b)

$$\frac{\|x^{k+1} - x^*\|_2}{\|x^k - x^*\|_\infty} = \frac{(1/2)^{k+1}}{\sqrt{2}(1/2)^k} = \frac{1}{2\sqrt{2}} \rightarrow \boxed{k - \text{stadi}}$$
$$= \frac{\sqrt{2}(1/2)^{k+1}}{(1/2)^k} = \frac{\sqrt{2}}{2} \rightarrow \boxed{k - \text{liche'}}$$

$\Rightarrow Q_1\{x^k\} = \frac{\sqrt{2}}{2}$ po $\| \cdot \|_\infty$