2 6)

$$x_{0} = 1$$

$$x_{1} = \phi(x_{0}) = \frac{3}{2}$$

$$e_{k} = ||x - x_{k}|| \leq \frac{d^{k}}{1 - d} ||x_{1} - x_{0}|| \leq 10^{-6}$$

$$\Rightarrow d^{k} \leq \frac{10^{-6} (1 - d)}{||x_{1} - x_{0}||}$$

$$\Rightarrow k \geq l_{1} \left(\frac{10^{-6} (1 - d)}{||x_{1} - x_{0}||}\right) \cdot l_{1} (d)$$

$$Fir d = \frac{1}{2}$$

$$k \geq l_{1} \left(\frac{7}{2}, 5 \cdot 10^{-7}\right) \cdot l_{1} (e, 25)$$

$$\Rightarrow k \geq l_{2} \left(\frac{7}{2}, 5 \cdot 10^{-7}\right) \cdot l_{2} (e, 25)$$

$$\Rightarrow k \geq 3, 6.7$$

$$A(50, 10, k \in N)$$

k = 10