$\frac{?}{i}$ $A = \begin{pmatrix} 1 & 10 \\ \delta & 1 \end{pmatrix}$ $\det(A - \lambda \hat{1}) = 0$

$$(1 - \lambda)^2 - 10\delta = 0$$

$$1 - \lambda = \pm \sqrt{10}\, \delta^{1/2}$$

$$\lambda_{1,2} = 1 \pm \sqrt{10}\, \delta^{1/2}$$

$$\mathcal{E}(\delta) = 1 + \sqrt{10}\, \delta^{1/2}$$

$$k(\delta) = \frac{d\mathcal{E}(\delta)}{d\delta} = \sqrt{10}\, \frac{1}{2\sqrt{\delta}}$$

Dne $\delta = 10$ u $\delta = 0{,}1$:

$$k(10) = \sqrt{10}\, \frac{1}{2\sqrt{10}} = \frac{1}{2} \qquad k(0{,}1) = \sqrt{10}\, \frac{\sqrt{10}}{2} = 5$$