



$$\begin{aligned}
 f(x) &= \log(1 - \sqrt{x}) \\
 D_f &= [0, 1) \\
 x &= 0\text{-nál maximum} \\
 f(0) &= 0 \\
 \lim_{x \rightarrow 1^-} \log(1 - \sqrt{x}) &= -\infty
 \end{aligned}$$

$$\frac{\partial}{\partial x} (\log(1 - \sqrt{x})) = \frac{1}{2(x - \sqrt{x})} < 0$$

$$\begin{aligned}
 \frac{\partial}{\partial x} \left( \frac{1}{2(x - \sqrt{x})} \right) &= \frac{1 - 2\sqrt{x}}{4\sqrt{x^3}(\sqrt{x} - 1)^2} \\
 &= 0 \text{ ha } x = \frac{1}{4} \\
 &< 0 \text{ ha } 0 > x < \frac{1}{4} \\
 &> 0 \text{ ha } \frac{1}{4} < x < 1
 \end{aligned}$$

$$R_j = (-\infty, 0]$$