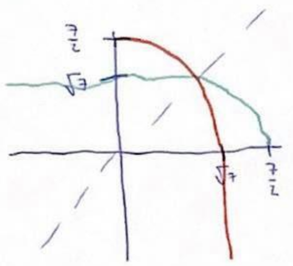
a, $f(x) = \sqrt{7-2x}$

$7-2x \geq 0$

$x \leq \frac{7}{2}$

$Df = (-\infty, \frac{7}{2}\rangle$

$Hf = \langle 0, \infty)$



$f^{-1}(x) = \frac{7-x^2}{2}$

$x = \sqrt{7-2y} \, |^2$

$x^2 = 7-2y$

$y = \frac{7-x^2}{2}$

$Df = \langle 0, \infty)$

$Hf = (-\infty, \frac{7}{2}\rangle$

b, $g: R \to R$

$g(x) = \left(\frac{1}{2}\right)^x$

prostá: $f(x_1) = f(x_2) \wedge x_1 \neq x_2$

$\left(\frac{1}{2}\right)^{x_1} = \left(\frac{1}{2}\right)^{x_2}$

$x_1 = x_2$

funkce může být ohraničená a prostá

Ohraničená: $Hf = (0, \infty)$

$a \in (-\infty, 0)$ $\left(\frac{1}{2}\right)^a = 2^a$ = kladný

$b \in (0, \infty)$ $\left(\frac{1}{2}\right)^b = \left(\frac{1}{2}\right)^b$ = kladný