

Výsledky:

Příklad 1. a) $x_k = \frac{\pi}{3} + \frac{2k\pi}{3}, \quad k \in \mathbb{Z}$

b) $x_k = \frac{k\pi}{2}, \quad k \in \mathbb{Z}$

c) $x_{1,k} = k\pi, \quad k \in \mathbb{Z}$
 $x_{2,k} = -\frac{\pi}{2} + 2k\pi, \quad k \in \mathbb{Z}$

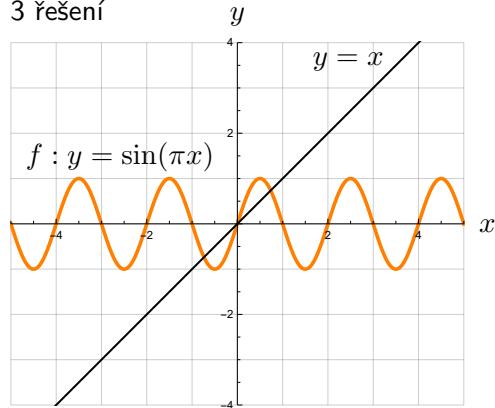
d) $x_{1,k} = \pi + 2k\pi, \quad k \in \mathbb{Z}$
 $x_{2,k} = \frac{\pi}{3} + 2k\pi, \quad k \in \mathbb{Z}$
 $x_{3,k} = -\frac{\pi}{3} + 2k\pi, \quad k \in \mathbb{Z}$

e) $x_k = \frac{\pi}{2} + k\pi, \quad k \in \mathbb{Z}$

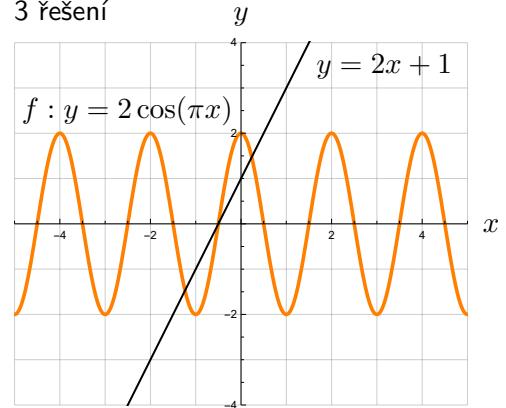
f) $x_{1,k} = k\pi, \quad k \in \mathbb{Z}$
 $x_{2,k} = \frac{2\pi}{3} + 2k\pi, \quad k \in \mathbb{Z}$
 $x_{3,k} = -\frac{2\pi}{3} + 2k\pi, \quad k \in \mathbb{Z}$

g) $x_{1,k} = \frac{k\pi}{2}, \quad k \in \mathbb{Z}$
 $x_{2,k} = \frac{\pi}{6} + k\pi, \quad k \in \mathbb{Z}$
 $x_{3,k} = -\frac{\pi}{6} + k\pi, \quad k \in \mathbb{Z}$

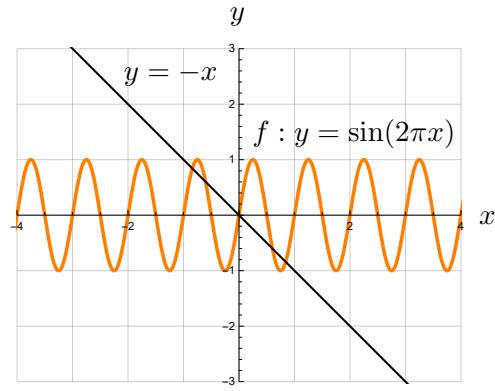
h) $x_k = \frac{\pi}{4} + k\pi, \quad k \in \mathbb{Z}$

Příklad 2. a) 3 řešení

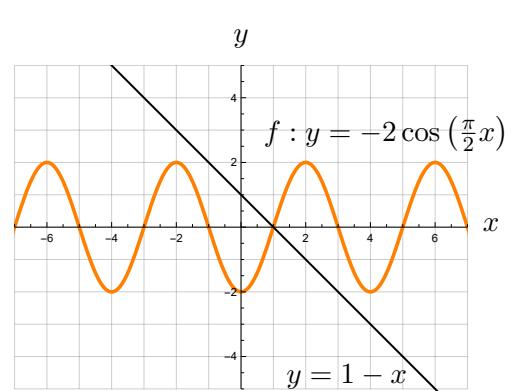
c) 3 řešení

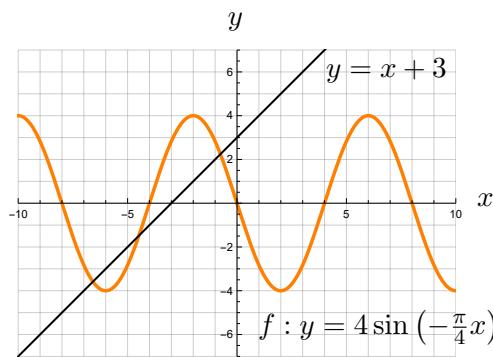


b) 5 řešení

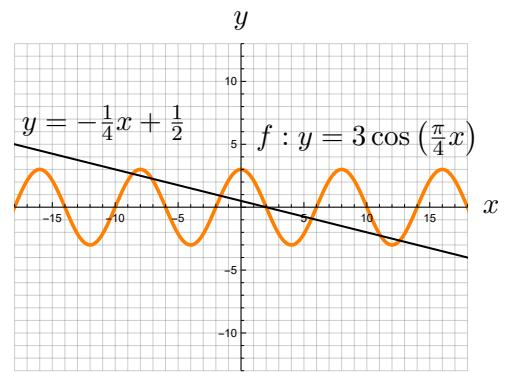
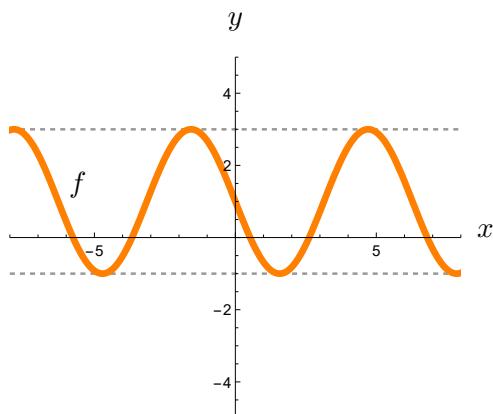
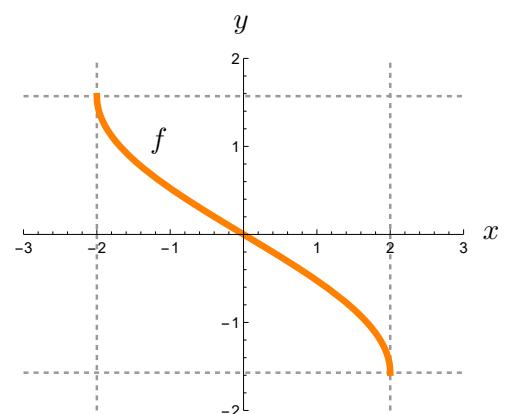
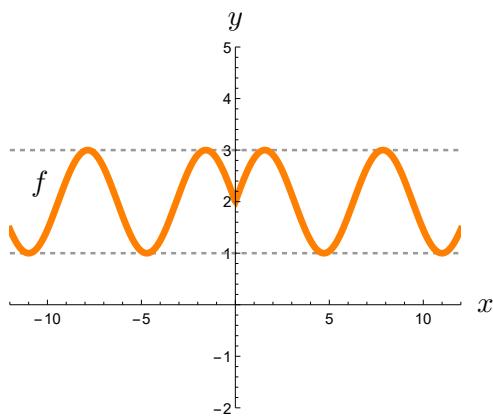
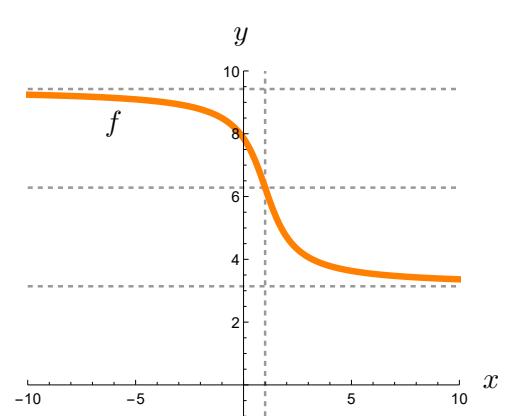


d) 1 řešení



Výsledky:**Příklad 2.** e) 3 řešení

f) 7 řešení

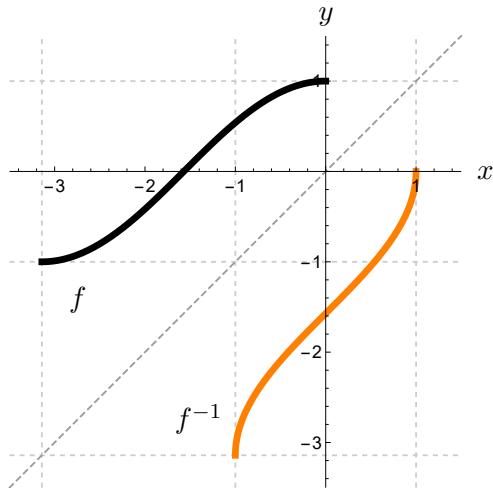
**Příklad 3.** a) $D(f) = \mathbb{R}, H(f) = \langle -1; 3 \rangle$ c) $D(f) = \langle -2; 2 \rangle, H(f) = \langle -\frac{\pi}{2}; \frac{\pi}{2} \rangle$ b) $D(f) = \mathbb{R}, H(f) = \langle 1; 3 \rangle$ d) $D(f) = \mathbb{R}, H(f) = \langle \pi; 3\pi \rangle$ 

Výsledky:

Příklad 4. a) $f^{-1}(x) = \arccos(-x) - \pi$

$$D(f^{-1}) = \langle -1; 1 \rangle$$

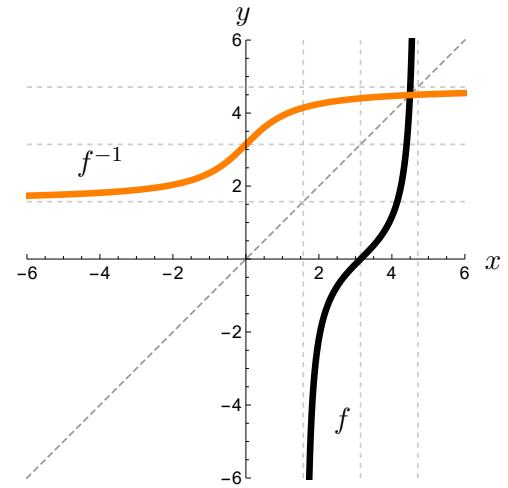
$$H(f^{-1}) = \langle -\pi; 0 \rangle$$



c) $f^{-1}(x) = \operatorname{arctg}(x) + \pi$

$$D(f^{-1}) = \mathbb{R}$$

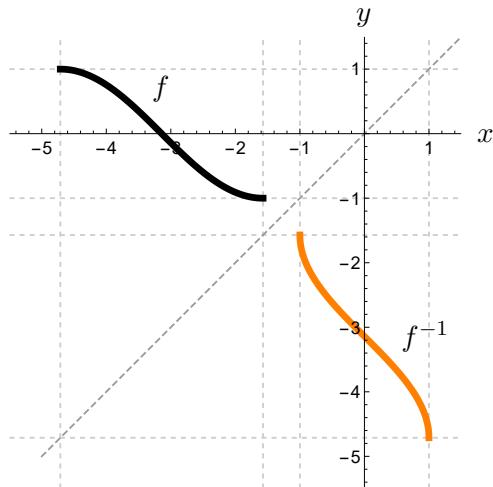
$$H(f^{-1}) = \left(\frac{\pi}{2}; \frac{3\pi}{2}\right)$$



b) $f^{-1}(x) = \arcsin(-x) - \pi$

$$D(f^{-1}) = \langle -1; 1 \rangle$$

$$H(f^{-1}) = \left\langle -\frac{3\pi}{3}; -\frac{\pi}{2} \right\rangle$$



d) $f^{-1}(x) = \operatorname{arccotg}(x) - \pi$

$$D(f^{-1}) = \mathbb{R}$$

$$H(f^{-1}) = (-\pi; 0)$$

