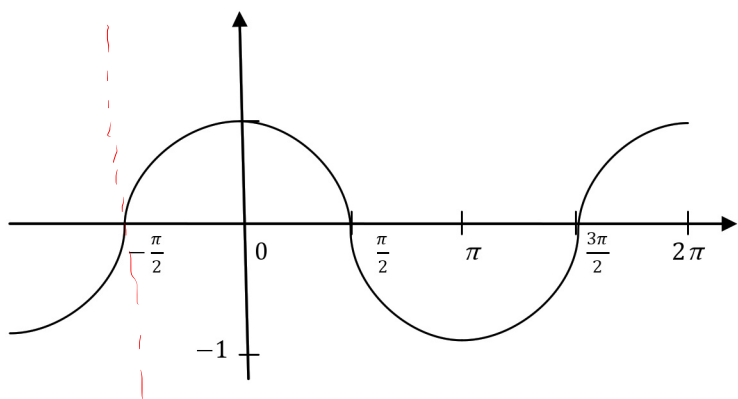
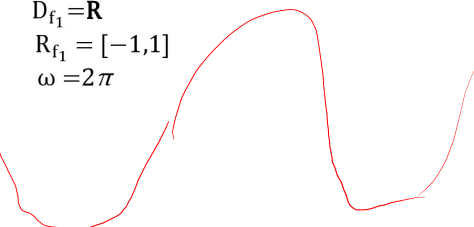


$$f_1(x) = \sin x$$

$$D_{f_1} = \mathbf{R}$$

$$R_{f_1} = [-1, 1]$$

$$\omega = 2\pi$$

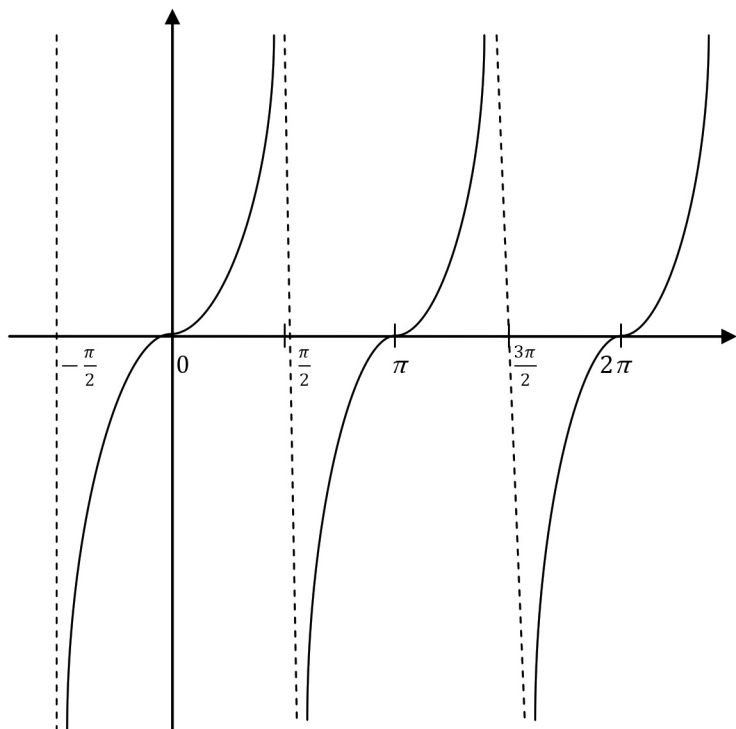
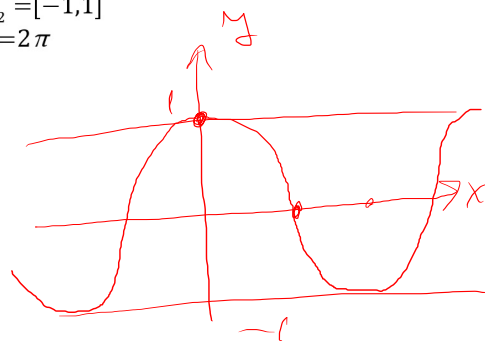


$$f_2(x) = \cos x$$

$$D_{f_2} = \mathbf{R}$$

$$R_{f_2} = [-1, 1]$$

$$\omega = 2\pi$$

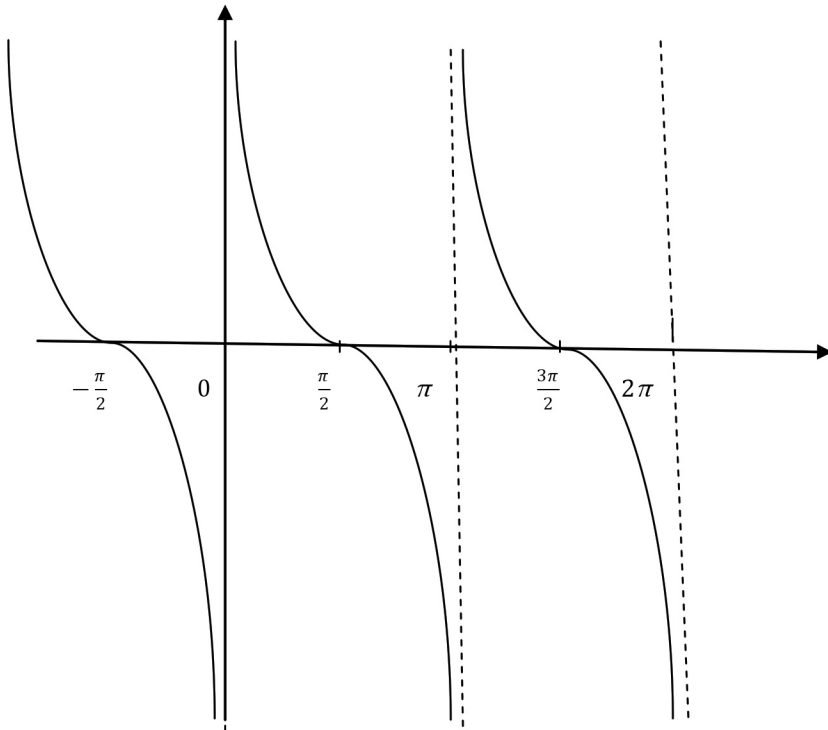


$$f_3(x) = \operatorname{tg} x$$

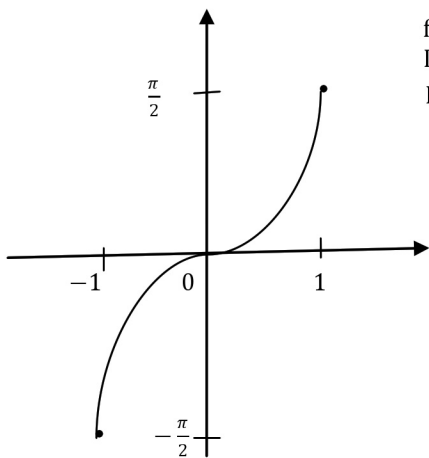
$$D_{f_3} = \mathbf{R} \setminus \left\{ \frac{\pi}{2} + k\pi \mid k \in \mathbf{Z} \right\}$$

$$R_{f_3} = \mathbf{R}$$

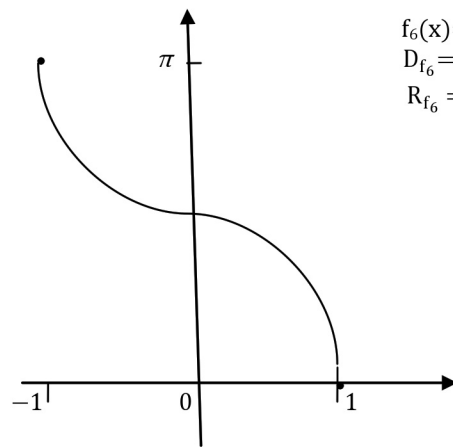
$$\omega = \pi$$



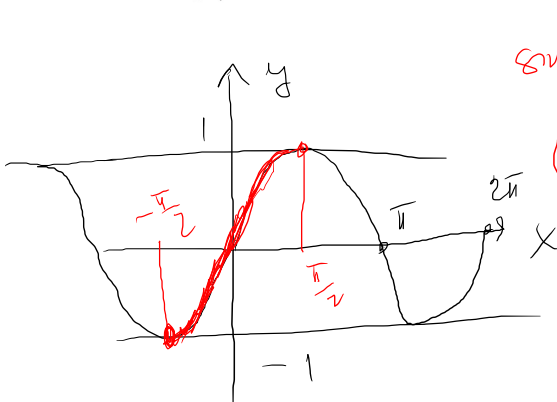
$f_4(x) = \text{ctg} x$
 $D_{f_4} = \mathbb{R} \setminus \{k\pi \mid k \in \mathbb{Z}\}$
 $R_{f_4} = \mathbb{R}$
 $\omega = \pi$



$f_5(x) = \arcsin x$
 $D_{f_5} = [-1, 1]$
 $R_{f_5} = [-\frac{\pi}{2}, \frac{\pi}{2}]$



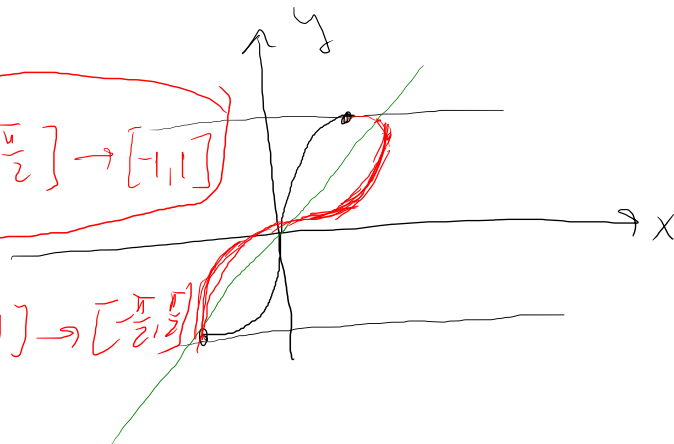
$f_6(x) = \arccos x$
 $D_{f_6} = [-1, 1]$
 $R_{f_6} = [0, \pi]$



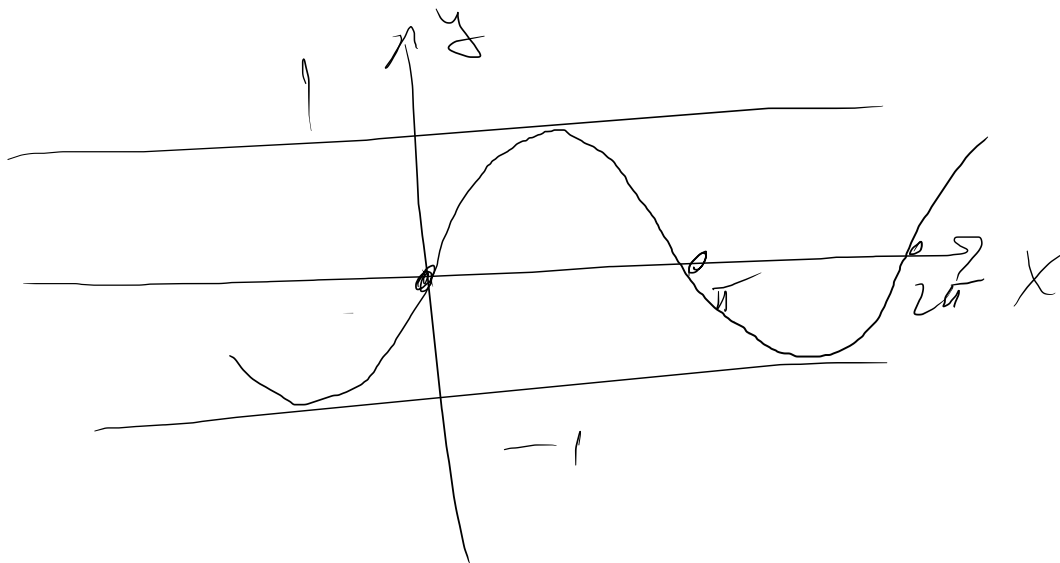
$\sin : \mathbb{R} \rightarrow [-1, 1]$

$\sin : [-\frac{\pi}{2}, \frac{\pi}{2}] \rightarrow [-1, 1]$

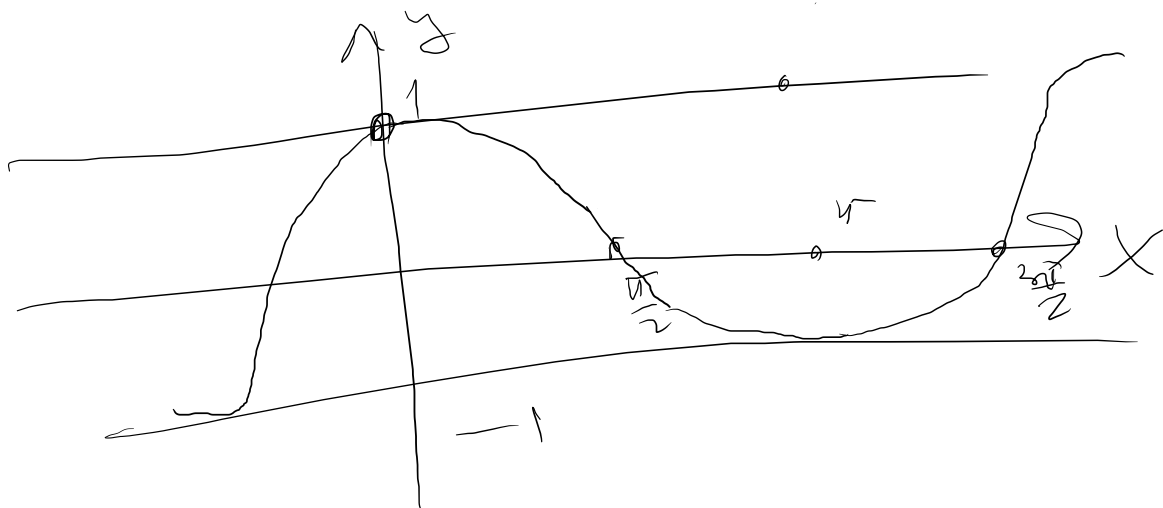
$\arcsin : [-1, 1] \rightarrow [-\frac{\pi}{2}, \frac{\pi}{2}]$



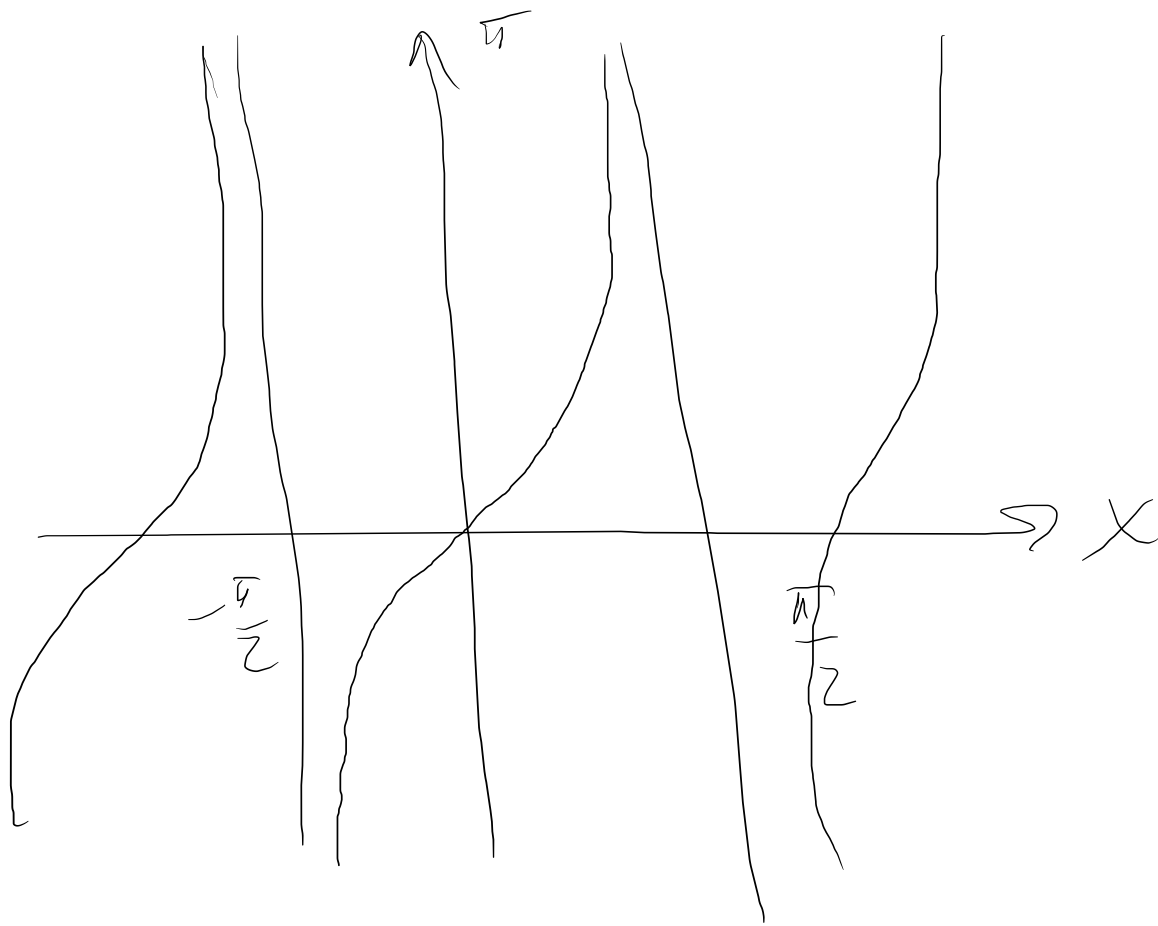
$$y = \sin x$$



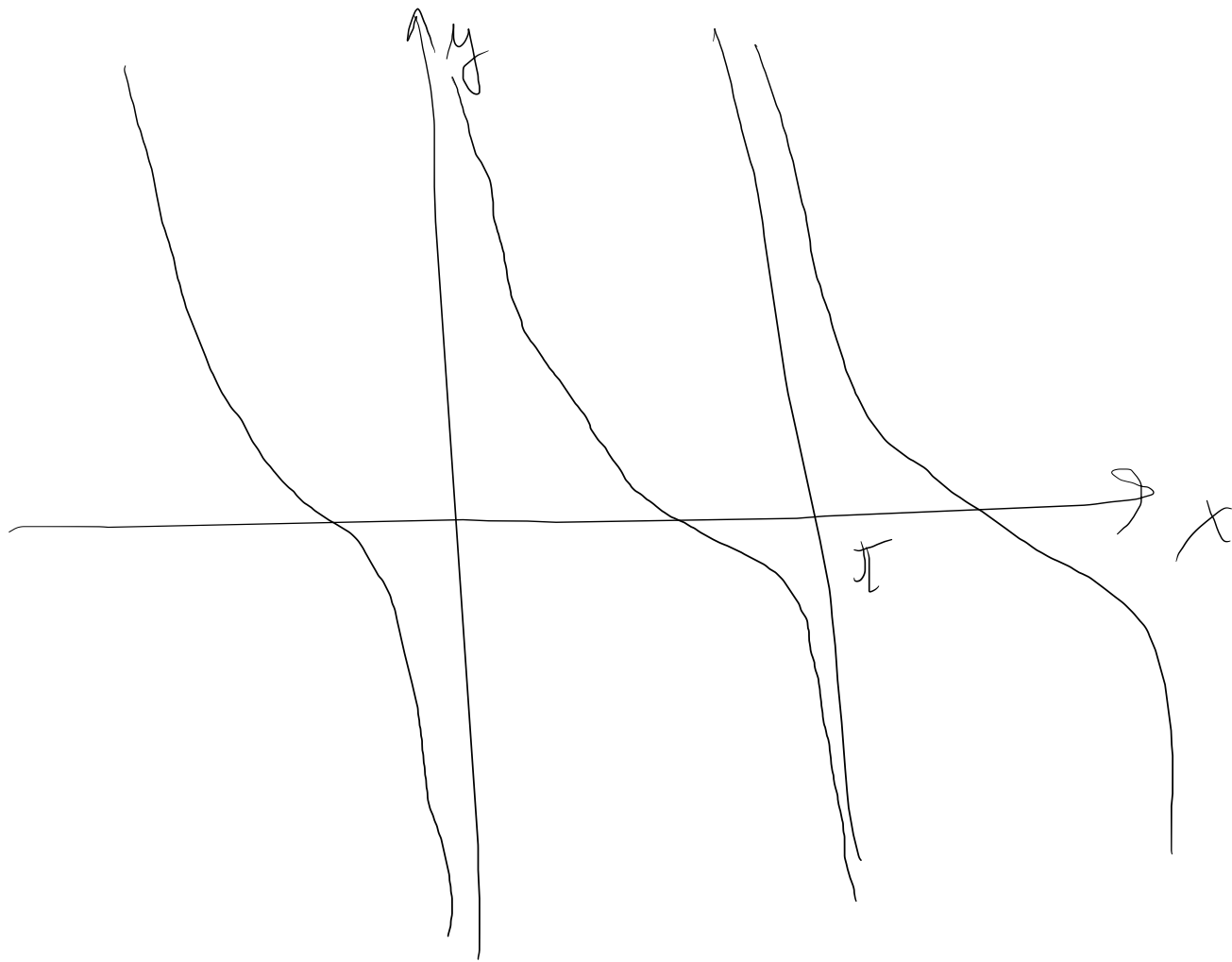
$$y = \cos x$$



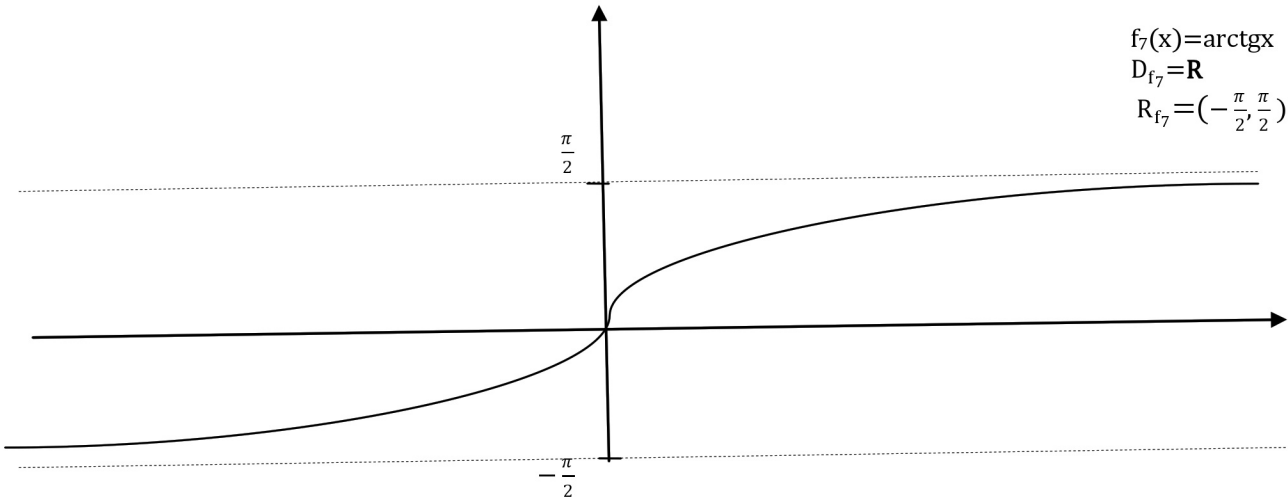
$$y = \frac{1}{g} x$$



$$y = \cot x$$



$$f_7(x) = \operatorname{arctg} x$$
$$D_{f_7} = \mathbf{R}$$
$$R_{f_7} = \left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$$



$$f_8(x) = \operatorname{arcc} x$$
$$D_{f_8} = \mathbf{R}$$
$$R_{f_8} = (0, \pi)$$

