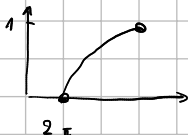1.7 c) $f(x) = \sin(x)$ $\quad x \in \left[2\pi, \frac{5\pi}{2}\right]$

$D_f = \left[2\pi, \frac{5\pi}{2}\right]$

$R_f = [0, 1]$

$g(x): [0,1] \longrightarrow \left[2\pi, \frac{5\pi}{2}\right]$

$x - 2\pi \in \left[0, \frac{\pi}{2}\right] \subset D_{arcsin}$

$y = \sin(x) = \sin(x - 2\pi)$

$\arcsin(y) = \arcsin(\sin(x - 2\pi))$

$x = \arcsin(y) + 2\pi = f^{-1}(y)$

d) $f(x) = \cos(x)$ $\quad, \quad x \in \left[-3\pi, -2\pi\right]$

$R_{arccos} = [0, \pi]$ $\quad x + 3\pi \in [0, \pi]$

$\cos(x + 3\pi) = \cos(x + \pi) = -\cos(x)$

$y = \cos(x) = -\cos(x + 3\pi)$

$\arccos(-y) = \arccos(\cos(x + 3\pi))$

$x = \arccos(-y) - 3\pi = f^{-1}(y)$

$D_{f^{-1}} = [-1, 1]$ $\quad R_{f^{-1}} = [-3\pi, -2\pi]$