(4) $f(x) = \sqrt{9-x^2}$

$9-x^2 \geq 0$

$\Rightarrow x^2 \leq 9$

$-3 \leq x \leq 3$

domain of x = $[-3, 3]$ where $x \in R$

Range of $f(x)$:

when $x = \pm 3$, $f(x) = 0$

$x = 0$, $f(x) = 3$

$\therefore$ Range of $f(x)$ = $[0, 3]$

Valid domain = $[-3, 3]$

Range : $[0, 3]$