

Assignment:

Find the domain and range of the following functions

$$(i) \ f(x) = \sqrt{x - 4}$$

$$(ii) \ f(x) = \sqrt{x} - 3$$

$$(iii) \ f(x) = \sqrt{x + 1}$$

Ans)i) Domain: $[4, \infty)$, $\{x|x \geq 4\}$

Range: $[0, \infty)$, $\{y|y \geq 0\}$

ii) Domain: $[3, \infty)$, $\{x|x \geq 3\}$

Range: $[0, \infty)$, $\{y|y \geq 0\}$

iii) Domain: $[-1, \infty)$, $\{x|x \geq -1\}$

Range: $[0, \infty)$, $\{y|y \geq 0\}$