

Q. 2 Let D be the domain of the real valued function f defined by

$$f(x) = \sqrt{25 - x^2}. \text{ Then, write } D.$$

Sol. Given function is, $f(x) = \sqrt{25 - x^2}$

For real valued of $f(x)$ $25 - x^2 \geq 0$

$$x^2 \leq 25$$

$$-5 \leq x \leq +5$$

\therefore

$$D = [-5, 5]$$