

2. Let D be the domain of the real valued function f defined by $f(x) = \sqrt{25 - x^2}$.

Then, write D .

Sol. We have $f(x) = \sqrt{25 - x^2}$

It is defined if $25 - x^2 \geq 0$

$$\rightarrow x^2 \leq 25$$

$$\rightarrow -5 \leq x \leq 5$$

Hence domain is $(-5, 5]$.