

MTH101: Practice Exercise Lecture No.6: Functions

Q.No.1

Find the natural domain and the range of the given function

$$h(x) = \cos^2(\sqrt{x}).$$

Q.No.2

Find the domain and range of function f defined by $f(x) = x^2 - 2$.

Q.No.3

Determine whether $y = \pm\sqrt{x+3}$ is a function or not? Justify your answer.

Q.No.4

Determine whether $y = \frac{x+2}{x+3}$ is a function or not? Justify your answer.

Q.No.5

(a) Find the natural domain of the function $f(x) = \frac{x^2 - 16}{x - 4}$.

(b) Find the domain of function f defined by $f(x) = \frac{-1}{(x+5)}$.