

NORTH-EX PUBLIC SCHOOL (Session 2020-21)
CLASS 11
Subject: Maths
CHAPTER 2
RELATIONS AND FUNCTIONS
WORKSHEET NO:3

Following link should be followed while making a detailed study of the topics
https://www.youtube.com/watch?v=MXxlrHann_U

NOTES

1. Introduction to Relations and Functions: Students should revise the concepts of set theory from the previous chapter.
2. Cartesian product of sets:
 - (a) Cartesian product of two sets
 - (b) Cartesian product of three sets
3. Relations : A relation from a non empty set A to a non empty set B is a sub set of the Cartesian product $A \times B$.
4. Range and domain of relation.
5. Functions: A relation f from a set A to a set B is said to be a function if every element of set A has one and only one image in set B.
6. Some types of functions and their graphs:
 - (a) Identity function
 - (b) Constant function
 - © Polynomial function
 - (d) Rational function

(e) Modulus function

(f) Signum function

(g) Greatest integer function

7. Algebra of real function:

(a) Addition of two real functions

(b) Subtraction of a real function from another

© Multiplication by a scalar

(d) Multiplication of two real functions

(e) Quotient of two real functions

WORKSHEET

Students are required to do the following exercises from NCERT book:

(a) Exercise 2.1

(b) Exercise 2.2

© Exercise 2.3