

Assignment No. 01

MTH100 (SPRING 2024)

Marks: 20

Due Date: 03 - 05 - 2024

DON'T MISS THESE: Important instructions before attempting the solution and submission of this assignment:

- Lectures 1-10 are covered in Assignment 1.
- Only students in Section of Mr. Mansoor are required to complete this Assignment.
- Students in other teachers' sections have different assignments. Do not solve Assignment of other sections because such Assignment solutions will get ZERO marks.
- Submitting a copied assignment or irrelevant assignment will result in a zero grade.
- Assignment 1 is due on May 03, 2024.
- Properly write and upload the solution of this assignment in MS Word on LMS.

Q1: Write in set builder notation.

Marks = 6

A = Set of first 10 Natural Numbers.

B = Set of positive odd numbers up to 40.

C = $\{-2, -1, 0, 1, 2, 3\}$

Q2: Find $A \cup B$ and $A \cap B$ for $A = \{2, 4, 6, 8, 10, 12, 14, 16\}$ and $B = \{12, 13, 14, 15, 16\}$.

Marks = 4

Q3: Evaluate $(2 + 2i)(1 - i)$.

Marks = 3

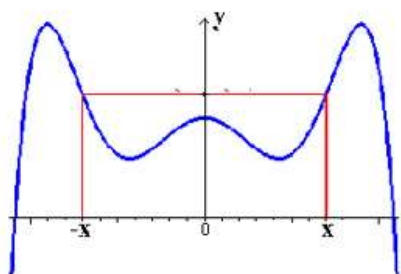
Q4: Evaluate $\frac{3+5i}{1+i}$.

Marks = 4

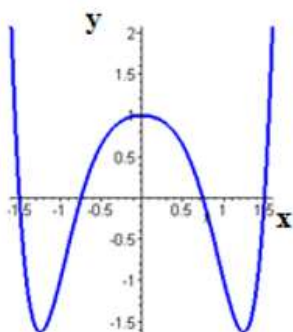
Q5: Determine from the given graphs whether these functions are even or odd. Give Justification.

Marks = 3

(a)



(b)



(c)

