

Chapter 1 Class 11 - Sets - Assertion and Reasoning Worksheet 2 by *teachoo*

Chapter: [Chapter 1 Class 11 Maths – Sets](#)

Name: _____

School: _____

Roll Number: _____

Instructions:

For each question, two statements are given: Assertion (A) and Reason (R). Choose the correct option.

- (a) Both A and R are true, and R is the correct explanation of A.
- (b) Both A and R are true, but R is not the correct explanation of A.
- (c) A is true, but R is false.
- (d) A is false, but R is true.

1. **Assertion (A):** The set of all possible valid games of chess is an infinite set.
Reason (R): While the number of possible games is astronomically large, it is finite because of rules like the 50-move rule that prevent games from continuing indefinitely.

2. **Assertion (A):** If a company's set of 'National Customers' (N) is combined with its set of 'European Customers' (E), and all European customers are also considered national customers ($E \subset N$), the resulting set is just the set of 'National Customers'.
Reason (R): The union of a set with its subset results in the superset.

3. **Assertion (A):** In a computer's file system, the set of files in the folder C: \Users\Documents is a proper subset of the files in the folder C: IUsers .
Reason (R): The Documents folder is contained within the Users folder, which also contains other folders and files.

4. **Assertion (A):** For a traffic light, the set of possible states {Red, Yellow, Green} are mutually disjoint.
Reason (R): A traffic light can only be in one of these states at any given moment; it cannot be both Red and Green simultaneously.

5. **Assertion (A):** In a company structure, the 'Sales Department' (Set D) is a single entity. If a 'Marketing Team' (Set M) is part of the Sales Department, then M is a subset of D .
Reason (R): If M is considered a team within D , then M itself is an element of D , not a subset. $M \in D$.

Important links

- Answer of this worksheet -<https://www.teachoo.com/25609/5370/Assertion-Reasoning---Worksheet-2/category/Teachoo-Questions---Assertion-Reasoning/>
- Full Chapter with Explanation, Activity, Worksheets and more – <https://www.teachoo.com/subjects/cbse-maths/class-11th/ch1-11th-sets/>
- Maths Class 11 - <https://www.teachoo.com/subjects/cbse-maths/class-11th/>

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