



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



CLASS 8

SUBJECT – Arithmetic Work sheet 11

Marks: 15

SETS Date:20.2.2021

Answer all the following questions (1×15=15)

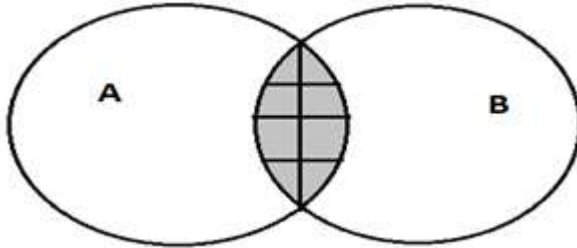
- Which of the following is subset of set $\{1, 2, 3, 4\}$.
 - $\{1, 2\}$
 - $\{1, 2, 3\}$
 - $\{1\}$
 - All of the mentioned
- $A = \{\emptyset, \{\emptyset\}, 2, \{2, \emptyset\}, 3\}$, which of the following is true.
 - $\{\{\emptyset, \{\emptyset\}\} \in A$
 - $\{2\} \in A$
 - $\emptyset \subset A$
 - $3 \subset A$
- Subset of the set $A = \{ \}$ is:
 - A
 - $\{ \}$
 - \emptyset
 - All of the mentioned
- What is the cardinality of the set of odd positive integers less than 10?
 - 10
 - 5
 - 3
 - 20
- The union of the sets $\{1, 2, 5\}$ and $\{1, 2, 6\}$ is the set _____
 - $\{1, 2, 6, 1\}$
 - $\{1, 2, 5, 6\}$
 - $\{1, 2, 1, 2\}$
 - $\{1, 5, 6, 3\}$
- The intersection of the sets $\{1, 2, 5\}$ and $\{1, 2, 6\}$ is the set _____
 - $\{1, 2\}$
 - $\{5, 6\}$
 - $\{2, 5\}$

d) {1, 6}

7. Two sets are called disjoint if there _____ is the empty set.
- Union
 - Difference
 - Intersection
 - Complement
8. Which of the following two sets are disjoint?
- {1, 3, 5} and {1, 3, 6}
 - {1, 2, 3} and {1, 2, 3}
 - {1, 3, 5} and {2, 3, 4}
 - {1, 3, 5} and {2, 4, 6}
9. The difference of {1, 2, 3} and {1, 2, 5} is the set _____
- {1}
 - {5}
 - {3}
 - {2}
10. The complement of the set A is _____
- $A - B$
 - $U - A$
 - $A - U$
 - $B - A$
11. The set difference of the set A with null set is _____
- A
 - null
 - U
 - B
12. Let the set A is {1, 2, 3} and B is {2, 3, 4}. Then number of elements in $A \cup B$ is
- 4
 - 5
 - 6
 - 7
13. Let the set A is {1, 2, 3} and B is {2, 3, 4}. Then number of elements in $A \cap B$ is
- 1
 - 2
 - 3
 - 4

14. Let A be set of all prime numbers, B be the set of all even prime numbers, C be the set of all odd prime numbers, then which of the following is true?
- a) $A \equiv B \cup C$
 - b) B is a singleton set.
 - c) $A \equiv C \cup \{2\}$
 - d) All of the mentioned

15. The shaded area of figure is best described by



- a) $A \cap B$
- b) $A \cup B$
- c) A
- d) B

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