



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Arithmetic
Duration: 40 min

Class: 7
Worksheet 40
SETS

Date: 24.06.20
Full Marks: 15

Choose the Correct options:

- Which one of the following sets is infinite?
 - The set of whole numbers less than 10
 - The set of prime numbers less than 10
 - The set of integers less than 10
 - The set of factors of 10
- A is the set of factors of 18. Which of the following is not a member of A?
 - 2
 - 3
 - 5
 - 9
- If $A = \{1, 3, 5, 7, 9\}$ and $B = \{2, 3, 5, 7\}$, what is $A \cup B$?
 - $\{3, 5, 7\}$
 - $\{2, 3, 5, 7\}$
 - $\{2, 3, 5, 7, 9\}$
 - $\{1, 2, 3, 5, 7, 9\}$
- If $A = \{1, 3, 5, 7, 9\}$ and $B = \{2, 3, 5, 7\}$, what is $A \cap B$?
 - $\{3, 5, 7\}$
 - $\{2, 3, 5, 7\}$
 - $\{2, 3, 5, 7, 9\}$
 - $\{1, 2, 3, 5, 7, 9\}$
- If $X = \{a, e, i, o, u\}$ and $Y = \{a, b, c, d, e\}$, then what is $Y - X$?
 - $\{a, e\}$
 - $\{i, o, u\}$
 - $\{b, c, d\}$
 - $\{b, c, d, i, o, u\}$
- If $A = \{1, 3, 5, 6, 7, 9\}$ and $B = \{2, 3, 5, 7, 9\}$, what is $A \cup B$?
 - $\{3, 5, 7, 9\}$
 - $\{2, 3, 5, 6, 7\}$
 - $\{2, 3, 5, 6, 7, 9\}$
 - $\{1, 2, 3, 5, 6, 7, 9\}$
- If $A = \{1, 3, 5, 6, 7, 9\}$ and $B = \{2, 3, 5, 7, 9\}$, what is $A \cap B$?
 - $\{3, 5, 7, 9\}$
 - $\{2, 3, 5, 6, 7\}$
 - $\{2, 3, 5, 6, 7, 9\}$
 - $\{1, 2, 3, 5, 6, 7, 9\}$
- The Universal Set = $\{-4, 3, -2, -1, 0, 1, 2, 3, 4\}$ and $A = \{0\}$. What is the complement of A?
 - $\{-4, -3, -2, -1, 0, 1, 2, 3\}$
 - $\{-3, -2, -1, 1, 2, 3\}$
 - $\{-4, -3, -2, -1, 1, 2, 3, 4\}$
 - $\{-4, -3, -2, -1, 1, 2, 3\}$

9. If $P = \{0, 1, 2, 3, 4\}$, $Q = \{4, 6, 8\}$ $R = \{6, 12, 18\}$ Then what is $(P \cap Q) \cup (Q \cap R)$?
- $\{4\}$
 - $\{4, 6\}$
 - $\{4, 6, 8\}$
 - $\{1, 2, 3, 4, 6, 8\}$
10. If $P = \{0, 1, 2, 3, 4\}$, $Q = \{4, 5, 6, 7\}$ $R = \{3, 6, 9\}$, and $S = \{6, 12, 18\}$
Then what is $(P \cup Q) \cap (S \cup R)$?
- $\{6\}$
 - $\{3, 6\}$
 - $\{4, 6\}$
 - $\{1, 2, 3, 4, 5, 6, 7, 9, 12, 18\}$
11. If $A = \{1, 3, 5, 15\}$, $B = \{2, 3, 5, 7\}$ $C = \{2, 4, 6, 8\}$ then what is $(A \cup B) \cap C$?
- $\{1,3,5\}$
 - $\{1,2,3\}$
 - $\{2,3,5\}$
 - $\{2\}$
12. If U (the universal set) = $\{1, 3, 5, 7, 9, 11, 13, 15, 17\}$ and $W = \{5, 7, 9, 11\}$, then $W' = \dots$
- $\{1, 3, 13, 15, 17\}$
 - $\{1, 3\}$
 - $\{2, 4, 6, 8, 10, 12, 14, 16\}$
 - $\{1, 3, 5, 7, 9, 11, 13, 15, 17\}$
13. $P = \{a, b, c, d, e, f, g, h, i, j, k, l, m\}$
- Roster Form
 - Universal Form
 - Set Builder Notation
 - Equivalent Inequalities
14. What type of set is denoted as either $\{ \}$ or \emptyset ?
- Superset
 - Empty (or Null) Set
 - Disjointed Set
 - Subset
15. If set A equals the people in your class and set B equals the people in your class who wear glasses. What is meant by $A \cap B$?
- All the people in your class.
 - The people in your class who wear glasses.
 - The people in your class who do not wear glasses.
 - Some of the people in your class who wear glasses