

The Punjab School-DRC
Class 8th
Math- Vacation Engaging Task

1. Define set with example?
2. What is the difference b/w whole number, and natural no?
3. Define proper and improper subsets.
4. Define power set?
5. Write the De-Morgan's law.
6. Write subset.

a. $A = \{e, f, g\}$

b. $B = \{-1\}$

7. Write proper subset

a. $D = \{0, 1\}$

b. $C = \{1, 2, 3\}$

8. Write the power set $D = \{x, y, z\}$
9. What is Commutative law of union/ intersection?
10. What is Associative law of union / intersection?
11. Write Distributive law.
12. Show that $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$

$A = \{0\}, B = \{0, 1\}, C = \{ \}$

13. $U = N, A = \phi$ and $B = P$

Verify $(A \cap B)^c = A^c \cup B^c$

14. $C = \{x \mid x \in N, 8 \leq x \leq 18\}$

$D = \{y \mid y \in N, 9 \leq y \leq 19\}$

Prove that $C \cup D = D \cup C$ with Venn diagrams.

15. $A = \{x \mid x \in Z, 8 \leq x \leq 25\}$

$B = \{y \mid y \in N, -2 < y < 6\}$

Then find $A \cap B = B \cap A$ with Venn-diagram.

$A \cap B = B \cap A$