

HOME ASSIGNMENT

1) Well-defined sets :-

- ★ All the colours in Rainbow.
- ★ All the points that lie on a straight line.
- ★ All the consonants of the English alphabet.
- ★ All the prime nos. less than 100.
- ★ All the letters in the word GEOMETRY.

2) Let $A = \{a, b, c, d, e, f\}$. Insert the appropriate symbol \in or \notin .

a) $d \in A$

b) $y \notin A$

c) $m \notin A$

d) $a \in A$

e) $e \in A$

f) $x \notin A$

3) Write in set builder form.

a) $A = \{2, 4, 6, 8\}$

Sol. $\{x : x \text{ is even and } x \leq 8\}$

b) ~~$\{2, 4, 6, 8\}$~~ $B = \{3, 9, 27, 81\}$

Sol. $\{x : x = 3^n, n \in \mathbb{N}, n \leq 4\}$

c) $C = \{1, 4, 9, 16, 25\}$

Sol. $\{x : x = n^2, n \leq 5, n \in \mathbb{N}\}$

d) $D = \{1, 3, 5, \dots\}$

Sol. $\{x : x \text{ is odd}\}$