

cw
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Elements of a Set

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$$A = \{1, 2, 3, 4, 5\}$$

A is a Set, whose elements are 1, 2, 3, 4 and 5.

\in = epsilon

\in = belongs to

\notin \notin A

Not belongs to

EX - 10 'B'

i) $2 \in A$

ans) True

ii) $5, 6 \in A$

ans) True

iii) $3, 4, 7 \in A$

ans) False

iv) $2, 8 \in A$

ans) False

v) $5 \in B$

ans) Wrong
 $5 \notin B$

vi) $12 \in B$

ans) Correct

vii) $14 \in B$

ans) Correct

viii) $9 \in B$

ans) Wrong
 $9 \notin B$

v) B is the set of even numbers between 2 and 16.

ans) True / Correct

vi) 4, 6 and 10 are the members of the set B.

ans) Correct

vii) Sets $\{4, 9, 6, 3\}$ and $\{6, 2, 4, 9\}$ are not the same.

ans) False

viii) Sets $\{0, 1, 3, 9, 4\}$ and $\{4, 0, 1, 3, 9\}$ are the same.

ans) True

ix) Sets $\{5, 4\}$ and $\{5, 4, 4, 5\}$ are not the same.

ans) False

x) Sets $\{8, 3\}$ and $\{3, 3, 8\}$ are the same.

ans) True

v) Collection of vowels used in the word 'ALLAHABAD' forms a set.

ans) True

vi) If P is the set of letters in the word 'ROOP', then $P = \{p, o, r\}$

ans) True

vii) If M is the set of letters used in the word 'MUMBAI', then: $M = \{m, u, b, a, i\}$

ans) True

4) i) the first five counting numbers.

ans) $\{1, 2, 3, 4, 5\}$

ii) The three types of angles.

ans) $\{\text{Acute-angle, Obtuse-angle, Right-angle}\}$

iii) the three types of triangles.

ans) $\{\text{Scalene triangle, Isosceles triangle, Equilateral triangle}\}$

iv) the members of your family.

ans) $\{\text{Father - Kailash C. Biswal, Mother - Priyambada Sahu, Me - Kabhya Priyadarshini}\}$

v) the first six consonants of the English Alphabet.

ans) $\{b, c, d, f, g, h\}$

vi) the first four vowels of the English Alphabet.

ans) $\{a, e, i, o\}$

vii) the names of any three Prime Ministers of India.

ans) $\{\text{Indira Gandhi, Rajiv Gandhi, Jawaharlal Nehru}\}$

5) i) {3, 8, 5, 15, 12, 7}
ans) {3, 8, 5, 15, 12, 7}

ii) {c, m, n, o, s}
ans) {c, m, n, o, s}

b) i) {2, 4, 8, 16, 64 and 128}
ans) {2, 4, 8, 16, 64, 128}

ii) {3, 5, 15, 45, 75 and 90}
ans) {3, 5, 15, 45, 75, 90}

6) i) Write the set of letters used in word 'BHOPAL'.
ans) {b, h, o, p, a, l}

ii) Write the set of vowels used in word 'BENGAL'.
ans) {e, a}

iii) Write the set of consonants used in the word 'HONG-KONG'.
ans) {h, n, g, k}