

Dt. 29.9.21

MATH
sets

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Exercise - 10 'B'

② $B = \{4, 6, 8, 10, 12, 14\}$

i) $5 \in B = \text{False}$ iii) $14 \in B = \text{True}$

ii) $12 \in B = \text{True}$ iv) $9 \in B = \text{False}$

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

True = B is the set of even numbers between 4 and 14.

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

③ True/False

i) Sets $\{4, 9, 6, 2\}$ and $\{6, 2, 4, 9\}$ are not the same.
(False)

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

iii) Sets $\{5, 4\}$ and $\{5, 4, 4, 5\}$ are not the same.
(False)

iv) Sets $\{8, 3\}$ and $\{3, 3, 8\}$ are the same. (True)

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

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

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

Exercise - 10 'C'

- (4) i) Set of all ~~odd~~ natural numbers that can divide 24 completely.

Roaster - $A = \{1, 2, 3, 4, 6, 8, 12, 24\}$

Set-builder - $A = \{x : x \text{ are all natural numbers that can divide 24 completely}\}$

- ii) Set of odd numbers between twenty and thirty-five

Roaster - $A = \{21, 23, 25, 27, 29, 31, 33, 35\}$

Set-builder - $A = \{x : x \text{ are odd numbers between 20 and 35}\}$

- iii) Set of letters used in the words 'CALCUTTA'

Roaster - $A = \{c, a, l, u, t\}$

Set-builder - $A = \{x : x \text{ are the letters used in the words 'CALCUTTA'}\}$

- iv) Set of names of the first five months of a year.

Roaster - $A = \{\text{January, February, March, April, May}\}$

Set-builder - $A = \{x : x \text{ are the names of the first five months of a year}\}$

- v) Set of all two-digit numbers that are perfect squares as well

Roaster - $A = \{16, 25, 36, 49, 64, 81\}$

Set-builder - $A = \{x : x \text{ are all two-digit numbers that are perfect squares as well}\}$

5) i) the first four odd numbers each divisible by 5
 $A = \{5, 15, 25, 35, 45\}$

ii) the counting numbers between 15 and 35 each of which is divisible by 6. $A = \{18, 24, 30\}$

iii) The name of the last three days of a week.
 $A = \{\text{Friday, Saturday, Sunday}\}$

iv) The name of the last four months of a year.
 $A = \{\text{September, October, November, December}\}$