

Exercise 10 (c)

① Write each of the following sets in the Roster Form:

i) $\{3, 6, 9, 12, 15\}$

ii) $\{-3, -2, -1, 0, 1, 2, 3\}$

iii) $\{s, e, h, o, l\}$

iv) $\{11, 13, 15, 17, 19\}$

v) $\{a, e, i\}$

vi) $\{m, d, r, s\}$

② Write each given set in the Roster Form:

i) $\{2, 3, 5, 7, 11, 13, 17, 19\}$

ii) $\{1^2, 2^2, 3^2, 4^2\} = \{1, 4, 9, 16\}$

iii) $\{2, 4, 6, 8\}$

iv) $\{a, b, c, d, e, f, g, h\}$

v) $\{b, a, s, k, e, t\}$

vi) $\{Jaipur, Jodhpur, Jalandhar, Jhansi\}$

vii) $\{\Delta, \square, \nabla, \diamond\}$

viii) $\{0, 9\}$

ix) $\{0, 1, 4, 9\}$ as $0=0^2, 1=1^2, 4=2^2$ and $9=3^2$

③ Write each given set in the Set-Builder form.

i) $\{x : x \text{ is an even natural number less than } 12\}$

ii) $\{x : x \text{ is a prime number less than } 12\}$

iii) $\{x : x \text{ is a month whose name starts with letter J}\}$

iv) $\{x : x \text{ is a vowel in English alphabets}\}$

v) $\{x : x \text{ is a day of the week whose name starts with letter T}\}$

vi) $\{x : x \text{ is a perfect square natural number upto } 25\}$

vii) $\{x : x \text{ is a natural number upto } 30 \text{ and divisible by } 5\}$.

④ Write each of the following sets in Roster (tabular) form and also in Set-Builder Form:

i) $\{1, 2, 3, 4, 6, 8, 12, 24\}$; $\{x : x \text{ is a natural number which divides } 24 \text{ completely}\}$

ii) $\{21, 23, 25, 27, 29, 31, 33\}$; $\{x : x \text{ is a natural odd number between } 20 \text{ and } 35\}$

iii) $\{c, a, l, c, u, t, t, a\}$; $\{x : x \text{ is a letter used in the word 'CALCUTTA'}\}$

iv) $\{\text{January, February, March, April, May}\}$; $\{x : x \text{ is a name of first five months of a year}\}$

v) $\{AS \{16, 25, 36, 49, 64, 81\}\}$; $\{x: x \text{ is a perfect square two digit number}\}$

⑤ Write in Roster form, the set of:

i) AS $\{5, 15, 25, 35\}$

ii) AS $\{18, 24, 30\}$

iii) AS $\{\text{Friday, Saturday, Sunday}\}$

iv) AS $\{\text{September, October, November, December}\}$