



Sets Ex 1.2 Q1(i)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

The above set in Roster form can be written as $\{a, b, c, d\}$. Since the letters a, b, c , and d precedes e in the english alphabet.

Sets Ex 1.2 Q1(ii)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

$$\begin{aligned} 1 \in N & \because 1^2 = 1 < 25 \\ 2 \in N & \because 2^2 = 4 < 25 \\ 3 \in N & \because 3^2 = 9 < 25 \\ 4 \in N & \because 4^2 = 16 < 25 \end{aligned}$$

Hence, the above set can be written as $\{1, 2, 3, 4\}$

Sets Ex 1.2 Q1(iii)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

We note that $a < x < b$ means that x is more than a but less than b .

The prime numbers which are more than 10 but less than 20 are 11, 13, 17 and 19.
Hence the above set can be written as $\{11, 13, 17, 19\}$

Sets Ex 1.2 Q1(iv)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

The above set can be written as $\{2, 4, 6, 8, \dots\}$ since all those natural numbers, which can be written as a multiple of 2 are the even natural numbers.

Sets Ex 1.2 Q1(v)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

We know that given any $x \in R$, x is always less than or equal to itself, i.e. $x \leq x$
Hence the above set is empty, i.e. \emptyset .

Sets Ex 1.2 Q1(vi)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

The Prime divisors of 60 are 2, 3, 5.

Hence the above set can be written as $\{2, 3, 5\}$

Sets Ex 1.2 Q1(vii)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by \dots , where the dots stand for 'and so on'.

The above set can be written as
 $\{17, 26, 35, 44, 53, 62, 71, 80\}$

Sets Ex 1.2 Q1(viii)

In Roster form, we describe a set by listing its elements, separated by commas and the elements are written within braces $\{ \}$. If a set has infinitely many elements, then comma is followed by ..., where the dots stand for 'and so on'.

As repetition is not allowed in a set, the distinct letters are T,R,I,G,O,N,M,E,Y.
Hence the above set can be written as

$$\{T, R, I, G, O, N, M, E, Y\}$$

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