

RD Sharma
Solutions
Class 11 Maths
Chapter 1
Ex 1.1

Sets Ex 1.1 Q1

Each set is a collection, but each collection need not be a set.

For example, a collection of beautiful women in Delhi is just a collection and not a set, for the term beautiful is not well defined. Only well defined collection of objects forms a set.

Sets Ex 1.1 Q2

(i) The collection of all natural numbers less than 50 forms a set as it is well defined.

(ii) It is not a set as the term 'good' is not well defined.

(iii) It forms a set as it is well defined.

(iv) It is not a set as the term 'most' is not well defined. A writer may be talented in the eye of one person, but he may not be talented in the eye of some other person.

(v) It is not a set as the term 'difficult' is not well defined.

A topic may be difficult for one person but may not be difficult for another person, so the term 'difficult' is vague.

(vi) It forms a set as it is well defined.

(vii) It forms a set as it is well defined.

(viii) It forms a set as it is well defined.

(ix) It is not a set as the term 'most dangerous' is not well defined.

The notion of dangerous animals differs from person to person.

(x) It forms a set as it is well defined.

Sets Ex 1.1 Q3

(i) $4 \in A$

(ii) $-4 \notin A$

(iii) $12 \notin A$

(iv) $9 \in A$

(v) $0 \in A$

(vi) $-2 \notin A$

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.