

Ex - 10.4

1. (i) ~~Subfinite~~ Infinite (ii) Finite (iii) Infinite (iv) Finite

2. (i) Empty (ii) Not empty (iii) Empty (iv) Empty (v) Not empty

3. (i) They are equal and equivalent $\{3, 5, 7\} = \{5, 3, 7\}$

(ii) ~~They are equivalent~~ because No. of elements in both sets are same

(iii) ~~They are equal and equivalent~~ $\{7, 1, 2, 1, 2\} = \{7, 2, 1\}$ $\{7, 2, 1\} = \{1, 2, 7\}$

(iv) They are equivalent because no. of elements in

both sets are same.

- 4. (i) Infinite (ii) Infinite (iii) Infinite (iv) Finite (v) Finite
- (vi) Finite (vii) Finite (viii) Infinite (ix) Infinite (x) Infinite

- 5. (i) Not empty (ii) Empty (iii) Empty (iv) Not empty
- (v) Not empty (vi) Empty (vii) Not empty

6. (i) Natural numbers less than 5 = {1, 2, 3, 4}

Letters of the word 'boat' = {b, o, a, t}

They are equivalent.

(ii) Even natural No. less than 12 = {2, 4, 6, 8, 10}

The {2, 4, 6, 8, 10} = {2, 4, 6, 8, 10}

They are equal and equivalent.

(iii) Odd natural no.s = {1, 3, 5, 7, ...}

{1, 3, 5, 7, ...} = {1, 3, 5, 7, ...}

They are equal and equivalent.

(iv) Letters of the word 'member' = {m, e, m, b, e, r}

Letters of the word 'remember' = {r, e, m, e, m, b, e, r}

{m, e, b, r} = {m, e, b, r}

They are equal and equivalent.

(v) Negative natural numbers = { }
 50th day of a month = { }

They are equal and equivalent.

(vi) Even natural no.s = {2, 4, 6, 8, ...}

Odd natural no.s = {1, 3, 5, 7, ...}

They are equivalent.