

1. state whether the given set is infinite or finite :-

(i)  $\{3, 5, 7, \dots\}$  infinite

(ii)  $\{1, 2, 3, 4\}$  finite

(iii)  $\{\dots, -3, -2, -1, 0, 1, 2\}$  infinite

(iv)  $\{20, 30, 40, 50, \dots, 200\}$  finite

2. Which of the following sets is empty?

(i) Set of counting numbers between 5 and 6.

Ans - ~~Set of counting numbers~~ between 5 and 6 (empty)

(ii) Set of odd numbers between 7 and 19.

(iii) ~~Set~~ set of odd number between 7 and 9. (empty)

(viii)  $x$  is a factor of  $y$ , then  $y$  is a multiple of  $x$ .

2. write all the factors of

(i) 16

Ans - 1, 2, 4, 8 and 16

(ii) 21

Ans - 1, 3, 7 and 21

(iii) 39

Ans - 1, 3, 13, 39

(iv) 48

Ans - 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

(v) 64

Ans - 1, 2, 4, 8, 16, 32, 64

(vi) 98

Ans - 1, 2, 7, 14, 49, 98

(3) write all the factors of :-

(i) 16

Ans = 1, 2, 4, 8, 16

(ii) 9

Ans = 1, 3, 9

(iii) 11

Ans = 1, 11

(iv) 15

Ans = 1, 3, 5, 15

(v) 18

Ans = 1, 2, 3, 6, 9, 18

(24) the product of two numbers is 36 and their sum is 13. find the numbers

since,  $36 = 1 \times 36, 2 \times 18, 3 \times 12, 4 \times 9, 6 \times 6$