9ᵗʰ Class - Maths
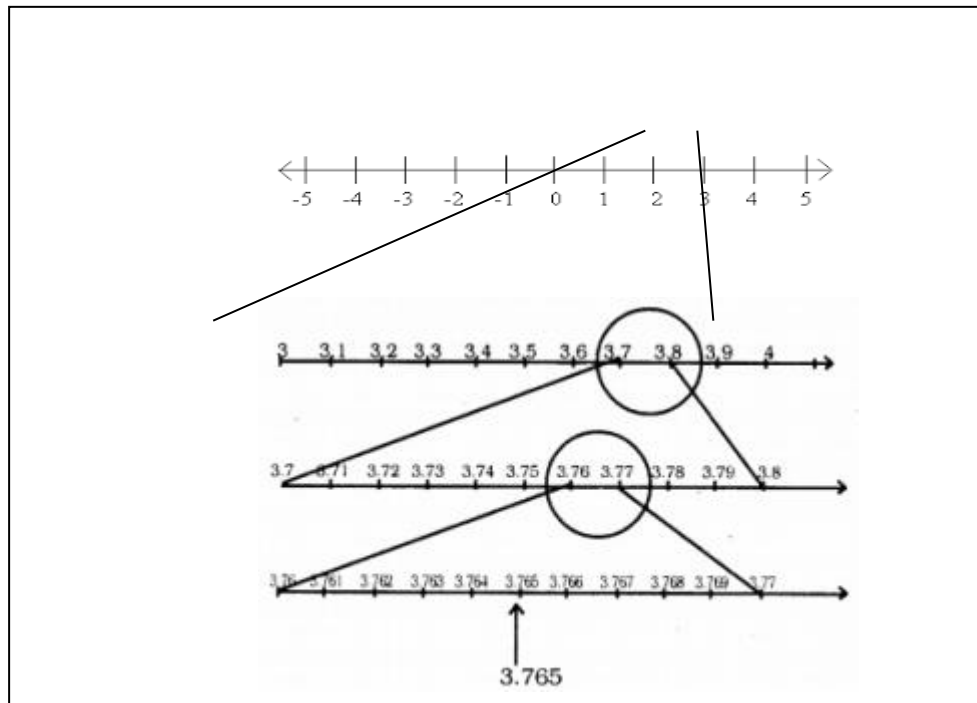# Chapter-1 (Number Systems)
Exercise - 1.4
(Representing Real Numbers on the Number Line)
Solution

Que1)   Visualise 3.765 on the number line using successive magnification.

Solution:

Step 1)   Firstly, Draw a number line to represent 3.765

Step 2)   Now, to locate 3.765 firstly we go at 3.7 which lies between 3 and 4 ,one of 10 divisions.
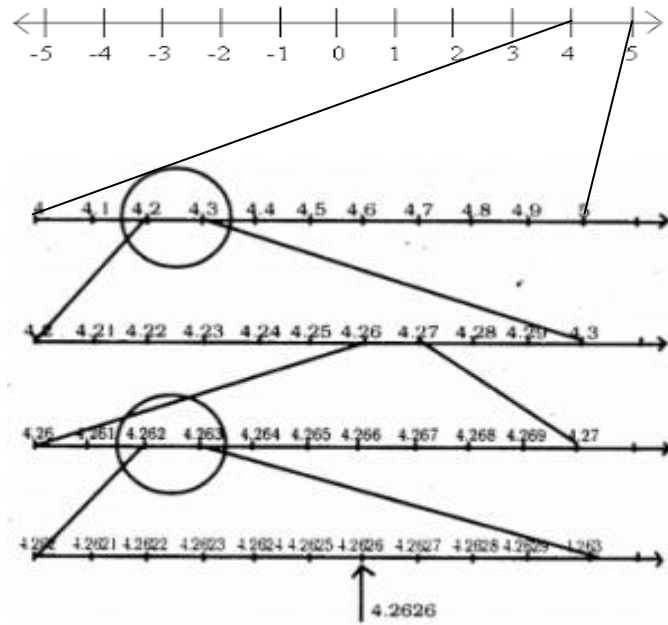
Step 3)   These divison between two numbers can be calculated by formula:
$d = (l-a)/(n+1)$. it will allways comes equal to 0.1

Step 4)   Again, repeat the same processor to search 3.76

Step 5)   In-last you will find 3.765 between 3.76 and 3.77.

Que 2) Visualise $4.\overline{26}$ on the number line, up to 4 decimal places.

Solution:

$4.\overline{26}$ = 4.262626......

Step 1) Firstly, Draw a number line to represent $4.\overline{26}$

Step 2) Now, to locate firstly we go at 4.2 which lies between 4 and 5 ,one of 10
divisions.

Step 3) These divison between two numbers can be calculated by formula:
d = (l-a)/(n+1) . it will always comes equal to 0.1

Step 4) Again, repeat the same processor to reach 4.2626 (given upto 4 decimal).