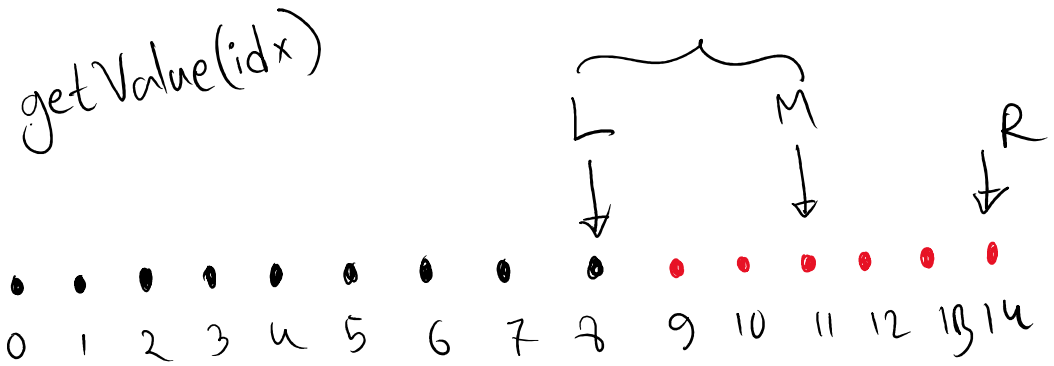
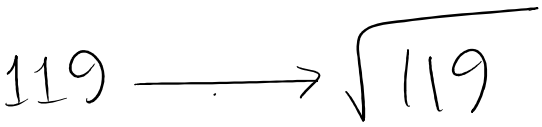
Class 09

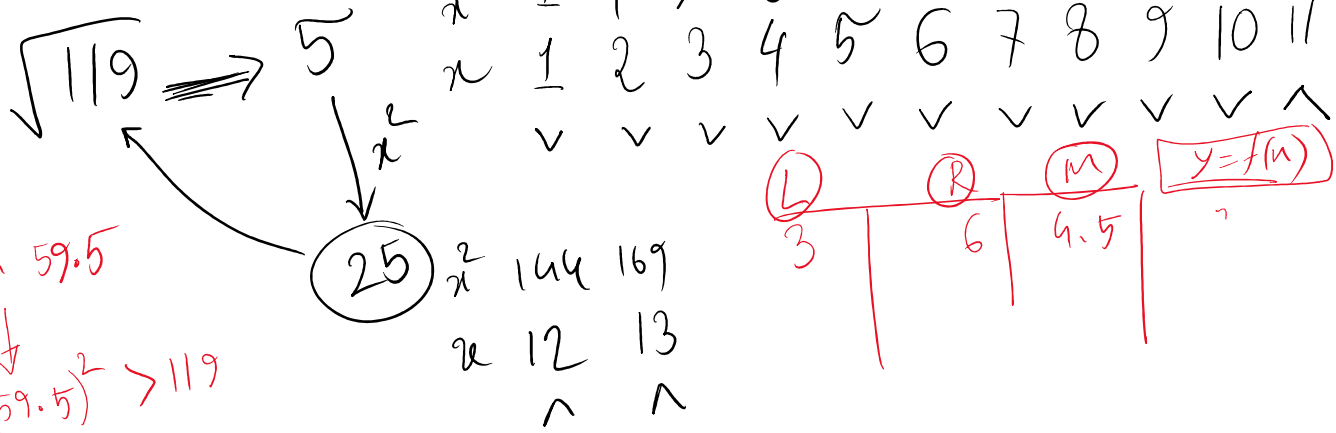
Friday, December 9, 2022 9:26 PM



$L = M + 1$

$R = M$





$|L - R| < 10^{-4}$

$L - R$

$0.1 \to 10^{-1}$

$0.01 \to 10^{-2}$

0.01 → 10

0.001 → 10^{-3}

0.0001 → 10^{-4}

0.00000 ? . . .

L = 10.91232 12

R = 10.91235 75

L	R
0.99999999	1

3628800

N!

$10 = 2 \times 5$

$10! = 1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9 \times 10$

$= 36288 \times 10^{2}$

$= 36288 \times 10 \times 10$

$$N! = \left[\frac{N}{P}\right] + \left[\frac{N}{P^2}\right] + \left[\frac{N}{P^3}\right] + \cdots$$

P

$$25! = \frac{25}{5} + \frac{25}{25} = 5 + 1 = 6$$

P = 5