MATHS → 1 lacs = 10^5

1 million = 10^6 = 10 Lakhs

1 crore = 10^7

1 billion = 10^9 = 100 crore

1 trillion = 10^{12}

CASE STUDY 1 → How many Maggi sold in a day in India.

Population in India : 1.2 billion = 120 crore

We are considering only Urban Population and above poverty line.

Urban population: 70% = 120 * (0.7) = 84 crore

Population above poverty line : 30% = 84 * 0.3 = 25.2 ≈ 25 crore

Eligible Base population.

Urban population - 4 family member average → monthly they buy 10 maggi each month.

Per head consumption → 2.5 maggi.

Population Distribution → 0-15 → Small child or kids. = 20% population

- Less than average. say 2 packets

= 25 * (0.2) population * 2 packets

base population = 50 * (0.2) = 10 Lacs Maggi per month

15-50 → School students to Office people = 60% population

- More than average, say 3 packets

= 25 (base population) * (0.6) population * 3 packets

= 75 * 0.6 = 49 Lacs Maggi per Month.

50+ → Consume less than average = 25 * 2 = 25 * (0.2) * 2 = 50 * 0.2 = 10 Lacs

Total approximation = 10 + 49 + 10 = 69 Lacs Maggi per month's.

Per day = $\frac{69}{30}$ = 2.3 lakhs Maggi per month.

Maths → 1 Lacs = 10^5

10 Lacs = 10^6 = 1 million

100 Lacs = 10^7 = 1 crore.

~~10 crore = 10^8 = 1 billion~~

1 billion = 10^9 = 100 crore

1 trillion = 10^{12}

Q → How many tshirts e-commerce companies sells in India?

Total population of India = 1.2 billion = 120 crore.

e-commerce → Population to access internet = 40% = 48 Crore.

Population where ecommerce company deliver product = 60% = 28 crore

~~It's~~ We can divide the population into male and female.

For now lets take 50% male and 50% female.

Male, 0-15 year : 30% population

: Individual own around 4 tshirt

= 14 (population) * 0.3 * 4

= 56 * 0.3 = 16.8 Lacs.

15-40 years : 40% population

- Own 8 shirts averagely

= 14 * 0.4 * 8

= 112 * 0.4 = 44.8 Lacs

40+ years : 30% population

- Individual own around 4 tshirt

= 14 * 0.3 * 4 = 16.8 Lacs.

Total tshirt own by men

= 16.8 + 44.8 + 16.8

= 78.4 Lacs.

Female, For 0-15 and 15-40, let it be same.

40+ years : 30% population

- Individual own around 2 tshirt

= 14 * 0.3 * 2 = 28 * 0.3 = 5.6 Lacs

Total tshirt by women

= 16.8 + 44.8 + 5.6

= 67.6

Total tshirt own = 78 + 67 = 155 Lacs = 1.5 crore

Average life of tshirt = 2 years.

So Demand per year = 1.5/2 = 75 lacs. per year.

Per day, how many tshirt was sold = 75/365 = 20,547 tshirt

[this also contains customers who will buy from offline store)