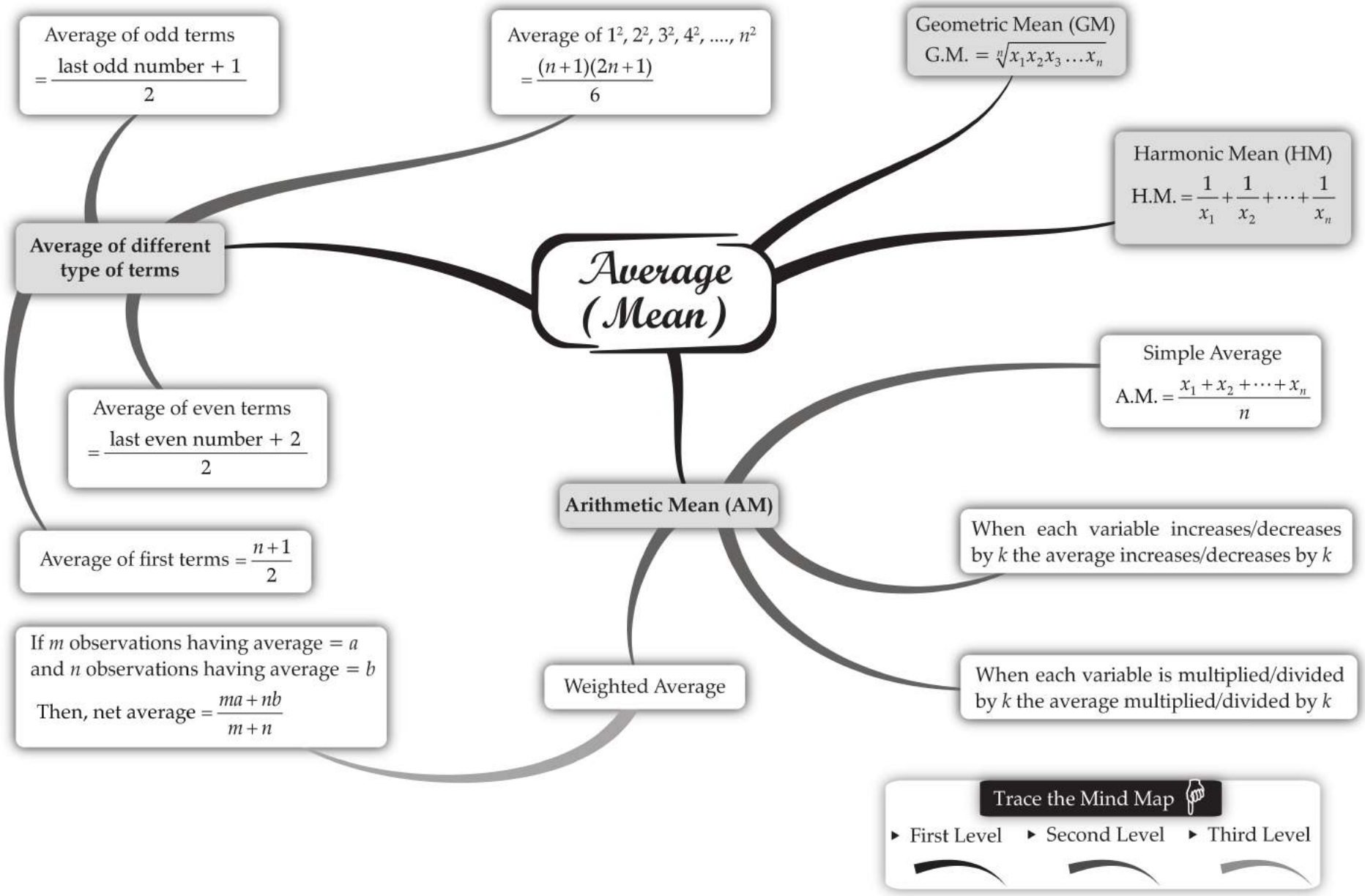
Average (Mean)
Average of different type of terms
Average of odd terms = (last odd number + 1)/2
Average of even terms = (last even number + 2)/2
Average of first terms = (n+1)/2
Average of 1², 2², 3², 4², ..., n² = (n+1)(2n+1)/6
Geometric Mean (GM)
G.M. = ⁿ√(x1x2x3 ... xn)
Harmonic Mean (HM)
H.M. = 1/x1 + 1/x2 + ⋯ + 1/xn
Arithmetic Mean (AM)
Simple Average
A.M. = (x1 + x2 + ⋯ + xn)/n
When each variable increases/decreases by k the average increases/decreases by k
When each variable is multiplied/divided by k the average multiplied/divided by k
Weighted Average
If m observations having average = a and n observations having average = b
Then, net average = (ma + nb)/(m + n)
Trace the Mind Map
First Level
Second Level
Third Level