Do the questions in lower This

1. Function distribution point stated in function exponential as following:

$$f(x) = 0,4. e^{-0,02x^2}$$

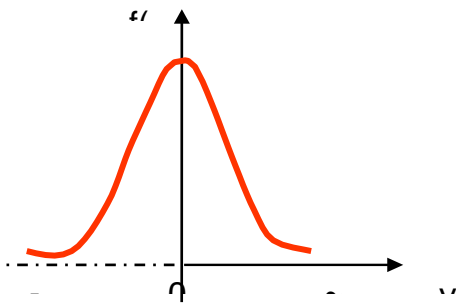Based on function the distribution, use function Gamma For determine: *30%*

   a. $\langle x \rangle$
   b. standard deviation (σ)

2. In a room with a temperature T there are N gas particles scattered throughout room. Particle probability with rate between v $_x$ and v $_x$ + dv $_x$ formulated:
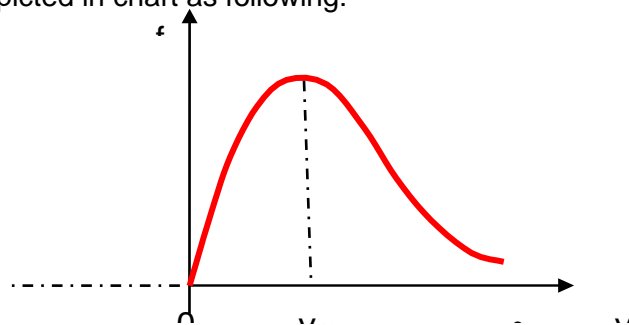
   30%

   a. is ... v^2 ... v_{x^2}
   b. Rate And energy kinetic each particle, as well as give explanation in a way physical.

3. For example, in a heating room there are N gas particles distributed in the following way Maxwell's equations. If the particle probabilities are distributed with a rate between v and v + dv depicted in chart as following:

   40%

   where ξ is a constant, N $_A$ = number Avogadro and R = general gas constant Determine:

      a. How many mark point culmination from function distribution rate in on
      b. big energy in system (U)
      c. constant Laplace (ɣ) if temperature room the in condition currently.

   Note: After your answers are uploaded, work on these UTS questions again and submit them to the class head, then the class head sends the results to anggorobs1960@yahoo.com on April 3 2023.