17-04-2019

$$f(x) = 2(1.72)x\, e^{-1.72x^2}$$

1) $P(x \leq 0.62)$

$$\int_0^{0.62} 2(1.72)x\, e^{-1.72x^2} = \left[-e^{-1.72x^2} \right]_0^{0.62} = 0.483752$$

2) $$\int_{0.55}^{1.18} 2(1.72)x\, e^{-1.72x^2} = \left[-e^{-1.72x^2} \right]_{0.55}^{1.18} = 0.503163$$

3) MOMENTI $\quad f(x) = a \exp(-ax) \quad x \geq 0 \quad a = 1.15$

1) MOMENTO NON CENTRATO DI ORDINE 1

$$\int_0^{\infty} 1.15 \exp(-1.15x) \cdot x \, dx = 0.8695652$$

2) MOMENTO NON CENTRATO DI ORDINE 2

$$\int_0^{\infty} x^2 \, 1.15 \exp(-1.15x) \, dx = 1.512287$$