

Question #243

Key: E

$$0.689 = F_{500}(1500) = 0.5F_{500}(1000) + 0.5F_{500}(2000) = 0.5 \left(\frac{200 + 110}{500} + \frac{310 + x}{500} \right) \Rightarrow x = 69$$

$$0.839 = F_{500}(3500) = 0.5F_{500}(2000) + 0.5F_{500}(5000) = 0.5 \left(\frac{310 + 69}{500} + \frac{379 + y}{500} \right) \Rightarrow y = 81$$