

Question #245

Key: E

$$n\lambda \geq \lambda_0 \left[1 + \left(\frac{\sigma_Y}{\theta_Y} \right)^2 \right]; \theta_Y = \alpha\theta = 10,000\alpha; \sigma_Y^2 = \alpha\theta^2 = 10^8\alpha$$

$$n\lambda \geq \left(\frac{1.96}{0.1} \right)^2 \left[1 + \frac{10^8\alpha}{10^8\alpha^2} \right] = 384.16(1 + \alpha^{-1})$$

Because α is needed, but not given, the answer cannot be determined from the information given.