Question #255
Key: E

$$0.95 = \Pr(0.95\mu < \bar{X} < 1.05\mu)$$

$$\bar{X} \sim N(\mu, \sigma^2/n = 1.44\mu^2/n)$$

$$0.95 = \Pr\left(\frac{0.95\mu - \mu}{1.2\mu/\sqrt{n}} < Z < \frac{1.05\mu - \mu}{1.2\mu/\sqrt{n}}\right)$$

$$0.95 = \Pr(-0.05\sqrt{n}/1.2 < Z < 0.05\sqrt{n}/1.2)$$

$$0.05\sqrt{n}/1.2 = 1.96$$

$$n = 2212.76.$$