

### Quiz Problem 8

**Problem.**

Let  $X_n \stackrel{iid}{\sim} \text{Exponential}(\lambda)$  so that  $\mathbb{E}[X_n] = 1/\lambda$ . What is the asymptotic distribution of

$$\sqrt{n} \left( \frac{1}{\bar{X}} - \lambda \right)?$$

□

