

72. $R \sim \text{Unif}(0.04, 0.08)$

$$V = 10,000e^R \quad \text{cdf of } V?$$

$$\begin{aligned} F(v) &= \Pr(V \leq v) = \Pr(10,000e^R \leq v) \\ &= \Pr\left(e^R \leq \frac{v}{10,000}\right) = \Pr\left(R \leq \ln\left(\frac{v}{10,000}\right)\right) \end{aligned}$$

$$u = \ln\left(\frac{v}{10,000}\right)$$

$$= \int_{0.04}^u f(r) dr \quad f(r) = \frac{1}{0.08-0.04} = \frac{1}{0.04} = 25$$

$$\int_{0.04}^u 25 dr = 25(u - 0.04)$$

↓
plug in $\ln\left(\frac{v}{10,000}\right)$

$$25\left(\ln\left(\frac{v}{10,000}\right) - 0.04\right) \rightarrow \underline{\underline{E}}$$