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Scribe

1) $\mu = 8 \text{ min}$ $\lambda = \frac{1}{8}$ $X = \text{Intervalo de tiempo entre Carros}$

$$X \sim \exp(\lambda = 1/8)$$

$$F(x) = \begin{cases} 0, & \text{si } x < 0 \\ 1 - e^{-\frac{x}{8}} & \text{si } x \geq 0 \end{cases}$$

$$P(X=x) = \begin{cases} \left(\frac{1}{8}\right) e^{-1/8 \cdot x} & \text{si } x \geq 0 \\ 0, & \text{e.o.c} \end{cases}$$

$$P(X > t) = 0.95$$

$$1 - P(X < t) = 0.95 = 1 - F(t) = 1 - (1 - e^{-t/8})$$

$$e^{-t/8} = 0.95$$

$$-\frac{t}{8} = \ln(0.95) = t = -\ln(0.95) \cdot 8 = 0.4103$$