State Little’s Law for open systems, using the average number of jobs in a system, the arrival rate, and the average time jobs spends in a system. Use standard notation.

**Answer:** \( E[N] = \lambda E[T] \)
Also acceptable (cf. Theorem 6.3): \( \bar{N}_{TimeAverage} = \lambda \bar{T}_{TimeAverage} \)

A professor takes 2 Ph.D. students per year on average. The average time to graduate is 5 years. How many students does the professor have on average?

**Answer:** \( E[N] = 2 \times 5 = 10 \) students