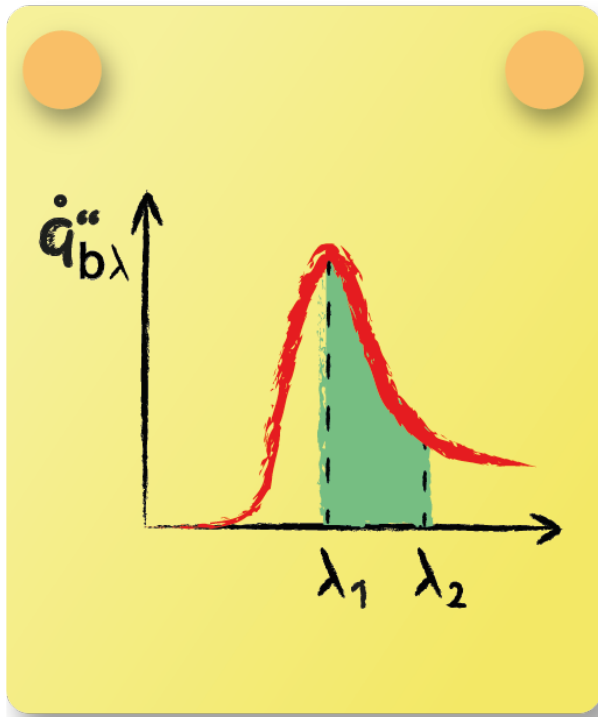# Variable Properties: Task 4



The diagram shows the distribution of black body radiation with respect to the wave length.

**1**



$$\dot{q}''_{b,\lambda_1 \rightarrow \lambda_2} = \dot{q}''_b (F_{0 \rightarrow \lambda_2} - F_{0 \rightarrow \lambda_1})$$

**2**



An expression for radiation in interval $[\lambda_1, \lambda_2]$ is obtained from the product of black body radiation $\dot{q}''_b$ and function $F_{0 \rightarrow \lambda_i}$, which gives the corresponding fractions.