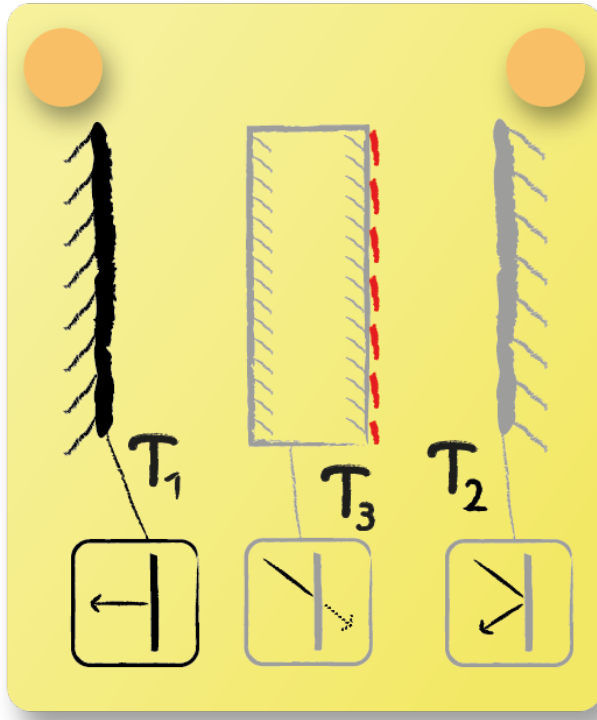


Surface Brightness: Task 11



The image shows three walls, of which wall 1 is a black body. The walls 2 and 3 are grey bodies, while $\tau_2 = 0$ and $\rho_3 = 0$.

1



$$\dot{Q}_{3,r} = \sigma \cdot \epsilon_3 \cdot A_3 \cdot T_3^4 + \sigma \cdot \epsilon_1 \cdot \tau_3 \cdot A_1 \cdot T_1^4$$

2



The right sides surface brightness of wall 3 is the sum of its emission and transmission of the black body radiation of wall 1.