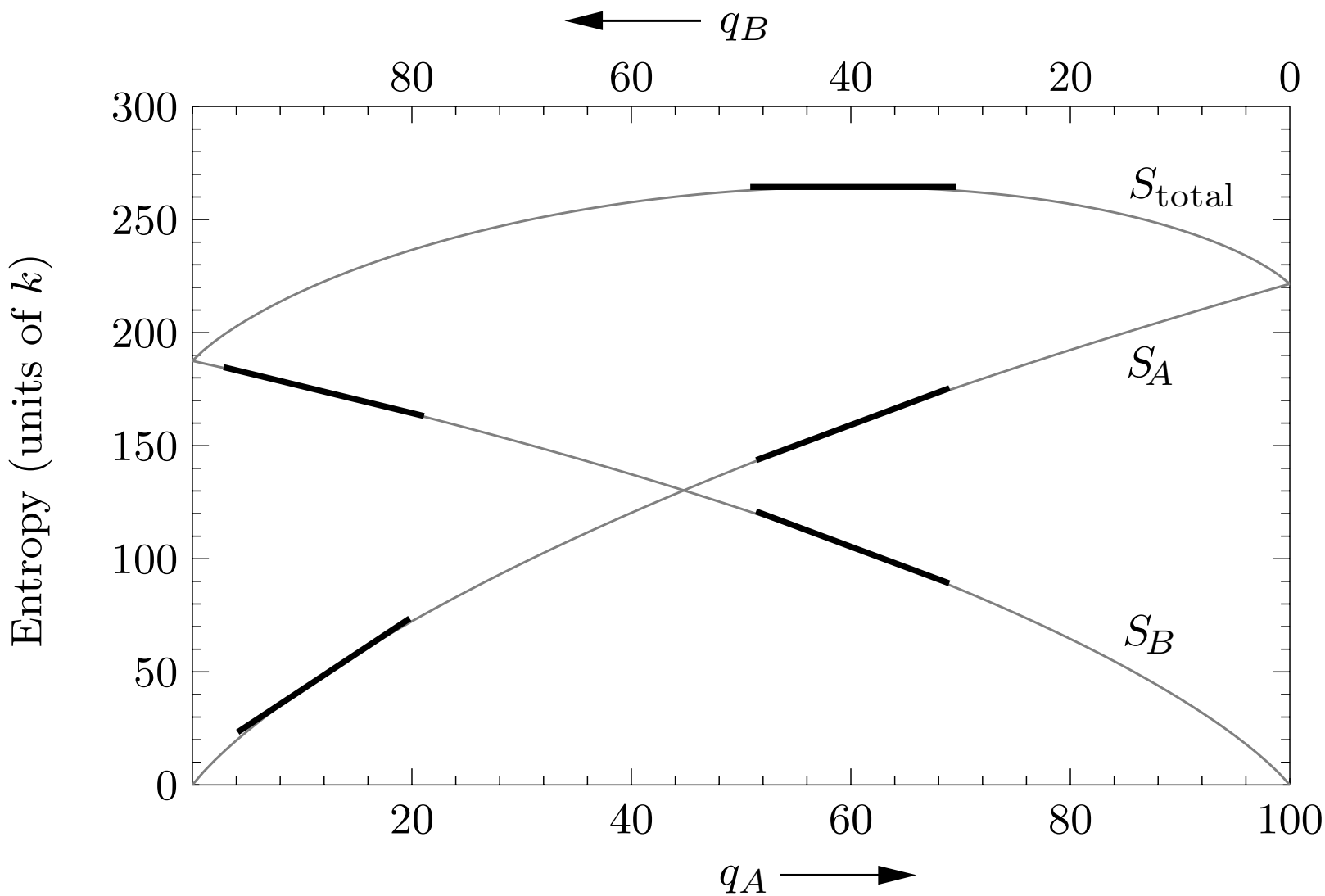

Figure 3.1. A plot of the entropies calculated in Table 3.1. At equilibrium ($q_A = 60$), the total entropy is a maximum so its graph has a horizontal tangent; therefore the slopes of the tangents to the graphs of S_A and S_B are equal in magnitude. Away from equilibrium (for instance, at $q_A = 12$), the solid whose graph has the steeper tangent line tends to gain energy spontaneously; therefore we say that it has the lower temperature.