Calculations

$$Q_{in_{air}} = \dot{m}_w C_{p_w} \Delta T_w \Rightarrow Q_{in_a} = (35.05)(4.18)(3) = 439.90$$

$$\dot{m}_a = \frac{Q_{in_{air}}}{C_{P_{air}} \cdot \Delta T_a} \Rightarrow \frac{439.9}{(1.005)(3)} = 145.90$$

$$V_{air} = \frac{\dot{m}_a}{\rho_{air}} \Rightarrow \frac{145.9}{1.189} = 122.71$$

Summary: This problem tasked us to determine different scenarios in which problem 2 absorbs heat instead of rejecting.

Materials
- Water
- Air
- Wet cooling tower

Analysis: In solving, I was able to determine that the idea is feasible.