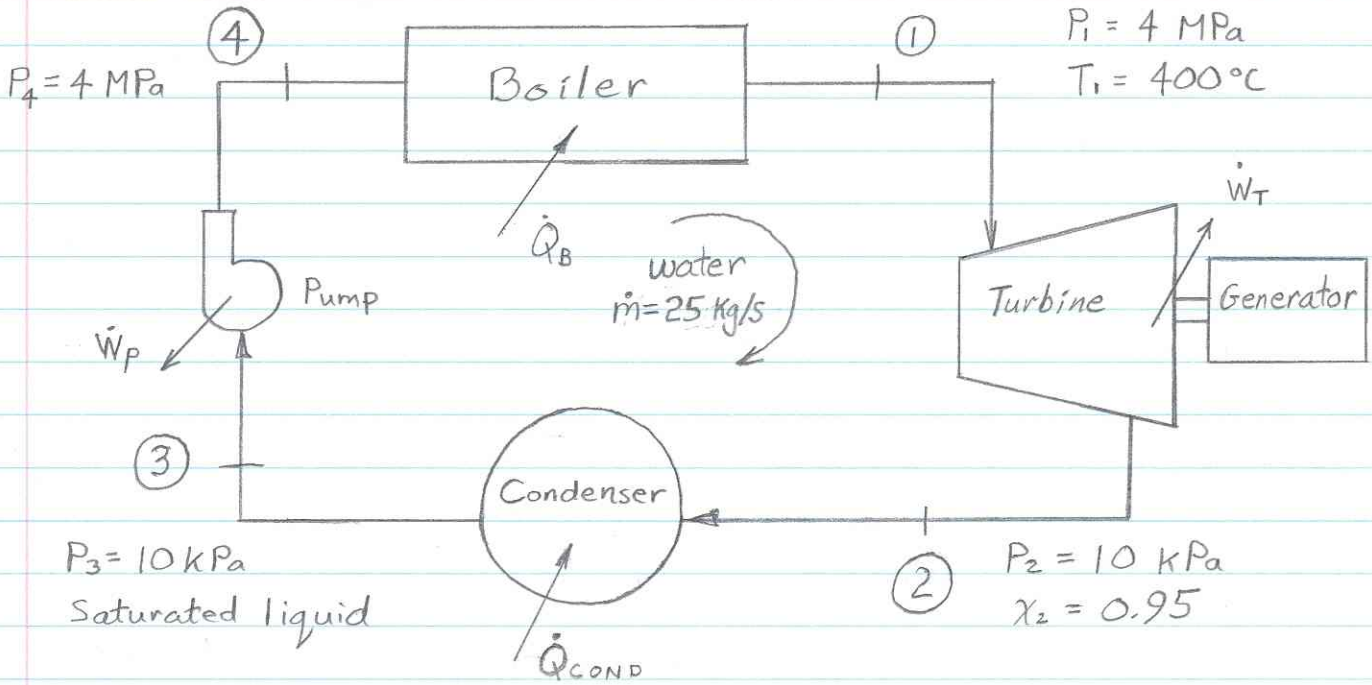
# Steam Power Cycle




$\dot{m} = 25$ kg/s
water

Assumptions:

1. Steady state, steady flow devices
2. Turbine and pump are adiabatic ($\dot{Q} = 0$)
3. $\Delta KE = 0$, $\Delta PE = 0$

Determine: (a) $\dot{W}_T$
(b) $\dot{Q}_{COND}$
(c) $\dot{W}_P$
(d) $\dot{Q}_B$
(e) the cycle efficiency