

Efficiency calculation

What is/are the correct formula(s) that describe the thermal efficiency of a simple Rankine cycle?

Answer: $\eta = \frac{W_{net}}{\dot{Q}_{in}} = 1 - \frac{\dot{Q}_{out}}{\dot{Q}_{in}} = \frac{\dot{Q}_{in} - \dot{Q}_{out}}{\dot{Q}_{in}} = 1 - \frac{h_4 - h_1}{h_3 - h_2}.$

Explanation: All 4 formula's describe the thermal efficiency of a simple Rankine cycle, however they are rewritten to different properties.