

**Problem Set # (3)**

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- These are suggested problems for you to work out.
- The problem numbers refer to those given at the end of Chapters in the Textbook:  
(Cengel & Boles, Thermodynamics: An Engineering Approach, 8<sup>th</sup> edition)
- The final answer(s) is/are provided.

Problem #	Final Answers
4-29	$m = 10.03 \text{ kg}$ , $Q = 2708 \text{ kJ}$
4-34	$V = 223.9 \text{ Volts}$
4-50	$\Delta h = 96.4 \text{ and } 93.4 \text{ kJ/kg}$
4-67	$T_2 = 56.9 \text{ }^\circ\text{C}$
5-14	$V_2 = 6.02 \text{ m/s}$
5-71	$m. = 0.107 \text{ kg/s}$
5-90	$I = 49.7 \text{ Ampere}$
5-105	$q = 193.5 \text{ kJ/kg}$
5-111	$T = 389.5 \text{ }^\circ\text{C}$ , and $w_{\text{flow}} = 288 \text{ kJ/kg}$