University of Jordan – Dept. of Chemical Engineering

0915321 ChE Thermodynamics (I)

Problem Set # (2)

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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, 8th edition). The final answer(s) is/are provided.

Problem #	Final Answers
3-87	0.172 m3/kg
3-89	(a) 1246 K, (b) 826 K, (c) 750 K
3-92	(a) 1861 kPa, (b) 1583 kPa, (c) 1600 kPa
3-100	(a) 457.6 K, (b) 465.9 K, (c) 200 K
3-109	V1= 0.5543 m3/s, m= 17.6 kg/s, V2= 0.4988 m3/s
4-2	-50.2 kJ
4-3	433.3 K, 173.3 K, 540 kJ
4-5	1.86 kJ
4-7	395 K, 2.96 kJ
4-9	1.355 x 10^^5 kJ