

Answers to Exam III – 1997-1998 – Winter (pjc)

Problem 1 — You need to show all your work for full credit

Process	Q (kJ)	W (kJ)	DU (kJ)
1 - 2	0	0.168	given
2 - 3	0.473	-0.119	given
3 - 4	0	-.137	given
4 - 1	-0.385	0	given
Total	0.088	-0.088	0

Problem 2 — Power cycle, $h_{th} = 0.186$

Problem 3

- a) -26 kW
- b) 0.637 kN-m
- c) 12 kW

Problem 4 — 2 ft/s