

Intermediate Dynamics: Homework 3

Due: 9 September 2013

- 1 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Conceptual Question 7, page 496.
- 2 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Conceptual Question 8, page 496.
- 3 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Conceptual Question 9, page 496.
- 4 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Conceptual Question 11, page 496.
- 5 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Problem 16, page 497.
- 6 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Problem 22, page 498.
- 7 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Problem 57, page 499.
- 8 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Problem 63, page 500.
- 9 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Problem 64, page 500.
- 10 Knight, *Physics for Scientists and Engineers, 3ed*, Ch. 17 Problem 77, page 501. There are many parts to this and no single one is that complicated. It will help to keep your work organized, with results stored in tables, etc, To ensure that you are correct in parts b) and c), some of the answers to part a) are $T_1 = 1215\text{ k}$, $T_2 = 1215\text{ K}$, $T_3 = 581\text{ K}$, $P_3 = 0.48 \times 10^5\text{ Pa}$.