# PHY131H1F "Introduction to Physics I" Suggested End of Chapter Items – Test 2

All of these suggested end-of-chapter items are from "Essential University Physics" Volume 1 (3rd Edition) by Richard Wolfson, ©2016 by Pearson Education, Inc.

Many of the solutions to these suggested items can be found by trying the MasteringPhysics Practice assignment:

Chapter 5-10 Practice (Not For Marks) due Nov. 13 – You don't have to actually look at it by Nov. 13, but you probably should.

#### **Introduction to Uncertainty in Physical Measurements**

Practice Problems 1-17 from Supplemental Reading

### **Chapter 5**

For Thought and Discussion: 2, 3, 5, 8, 10

Exercises: 16, 17, 20, 21, 26, 27\*, 28, 30, 31

Problems: 40, 43, 44, 45, 49, 57, 59, 66, 75\*\*

\* NOTE: the answer for the speed of the train is 71.4 km/hr

\*\* NOTE: In order for the pilot to experience "6g" at the bottom of the turn, the actual upward acceleration of the plane should be 5g, since the pilot experiences 1g even when not accelerating.

#### **Chapter 6**

For Thought and Discussion: 1, 4, 7, 8, 12 Exercises: 13, 14, 17, 22, 25, 29, 31, 33, 36, 40, 42 Problems: 47, 53, 59, 70, 77, 89

#### **Chapter 7**

For Thought and Discussion: 4, 5, 6, 8 Exercises: 13, 16, 19, 20, 21, 25, 26 Problems: 37, 40, 42, 45, 54, 57, 59, 60, 62 Passage Problems: 68, 69, 70, 71

#### **Chapter 8**

For Thought and Discussion: 2, 3, 6 Exercises: 11, 15, 17, 18, 19, 25, 26, 32 Problems: 34, 36, 58, 66, 70

## Chapter 9

For Thought and Discussion: 2, 3, 4, 8, 12 Exercises: 14, 18, 20, 22, 26, 29, 31\*, 33 Problems: 40, 45, 51, 52, 61, 65, 78, 79, 89

Passage Problems: 94, 95, 96, 97

\* NOTE: the total mass of the second truck is 6608 kg, implying a load of 1108 kg, well below the maximum permissible load.

## Sections 10.1, 10.2, 10.3

For Thought and Discussion: 2, 4, 5, 8 Exercises: 13, 18, 20, 21, 22, 25, 32 Problems: 52, 57, 59, 74