

Name: _____

CVEN 311-503 – “Fluid Dynamics”

Quiz #1 – Fall 2011

Prof. Brumbelow

September 9, 2011

1. There are several physical properties of water that I have said need to be memorized. Fill in the blanks below:
 - a. The specific weight of water in English units is: _____ (provide value and units)
 - b. The density of water in English units is: _____ (provide value and units)
 - c. The density of water in metric units is: _____ (provide value and units)
 - d. The specific gravity of water in metric units is: _____ (provide value and units)

2. A steel plate (weight 160 lbs, area 4 ft²) slides along a 15° slope covered in a 0.04 inch layer of motor oil ($\mu = 8.0 \times 10^{-3}$ lb-sec/ft²) at constant velocity. What is the speed of the plate?

