

Name: _____

CVEN 311-501 – “Fluid Dynamics”

Quiz #1 – Fall 2010

Prof. Brumbelow

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1. Give the formal definition and fundamental units for the following (e.g., the formal definition of “speed” is “distance traveled per unit time”, fundamental units “L/T”):
 - a. DENSITY

 - b. SPECIFIC WEIGHT

 - c. SPECIFIC GRAVITY

2. An aluminum wafer is in the shape of a right triangle with sides of length 12 mm, 16 mm, and 20 mm, respectively, and has mass 0.518 g. Will the wafer be able to rest on the surface film of water due to the water’s surface tension (7.34×10^{-2} N·m)? Fully support your answer.