

Homework H15.B

Given: The buoyancy force on a ship is to be calculated through modeling the ship as a prismatic body with a triangular cross section, as shown below. The weight of the ship and its cargo is W . The water in which the ship floats has a mass density of ρ .

Find: Determine the draft d of the ship.

Leave your answer in terms of, at most: α , b , g , W and ρ .

