

Homework Problem H16.A

Given: An angled water gate is supported by a pin joint at A and a roller support at B. The gate has a dimension into the page of b . The water has a density of ρ , and the weight of the gate is negligible compared to the weight of the water that it supports.

Find: Determine the reaction force on the gate at support B.

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

