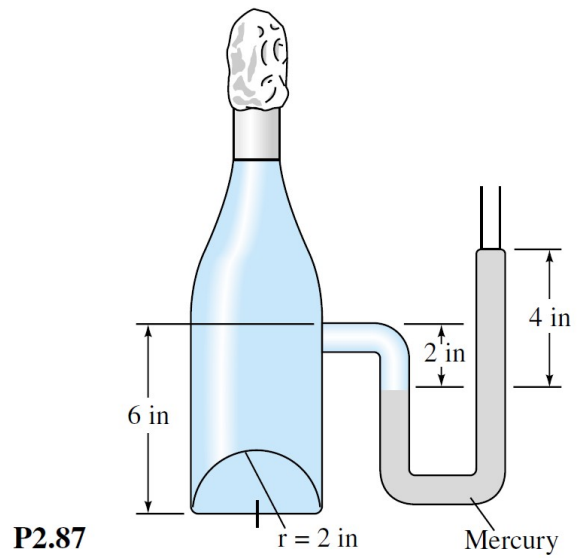


Oppgaver fra White 7. utgave

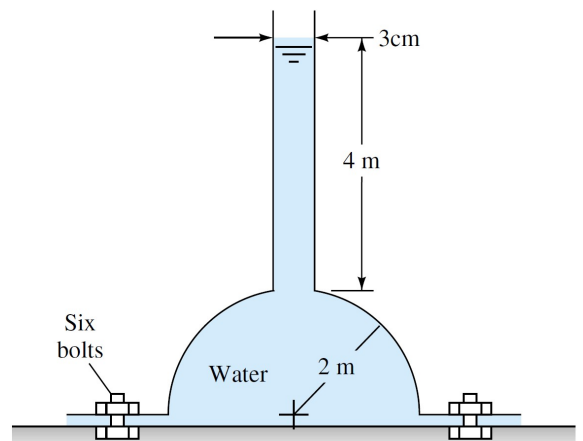
Oppgave 2.98 (2.87 i 6. utgave)

P2.87 The bottle of champagne (SG = 0.96) in Fig. P2.87 is under pressure, as shown by the mercury-manometer reading. Compute the net force on the 2-in-radius hemispherical end cap at the bottom of the bottle.



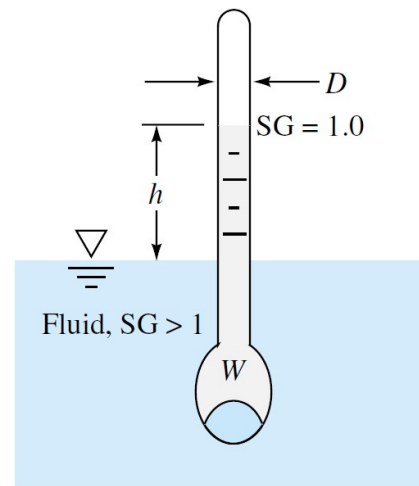
Oppgave 2.102 (2.91 i 6. utgave)

P2.91 The hemispherical dome in Fig. P2.91 weighs 30 kN and is filled with water and attached to the floor by six equally spaced bolts. What is the force in each bolt required to hold down the dome?



Oppgave 2.122 (2.109 i 6. utgave)

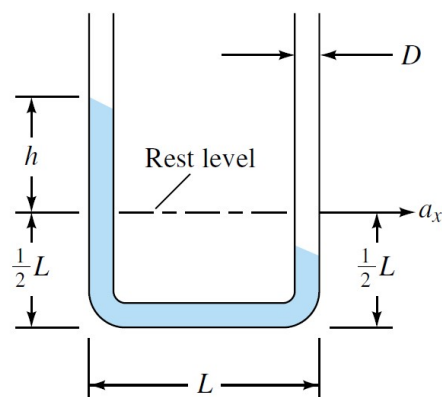
P2.109 A *hydrometer* floats at a level which is a measure of the specific gravity of the liquid. The stem is of constant diameter D , and a weight in the bottom stabilizes the body to float vertically, as shown in Fig. P2.109. If the position $h = 0$ is pure water ($SG = 1.0$), derive a formula for h as a function of total weight W , D , SG , and the specific weight γ_0 of water.



P2.109

Oppgave 2.168 (2.150 i 6. utgave)

P2.150 A cheap accelerometer, probably worth the price, can be made from a U-tube as in Fig. P2.150. If $L = 18$ cm and $D = 5$ mm, what will h be if $a_x = 6$ m/s²? Can the scale markings on the tube be linear multiples of a_x ?



P2.150

Oppgave om rotasjon (2.153 i 6. utgave):

Anta at U-røret i Fig. P2.168 istedet roterer omkring høyre legg med 95 omdreininger per minutt. Hvor stor vil høyden h bli hvis $L = 18$ cm og $D = 5$ mm?

P2.153 Suppose the U-tube in Fig. P2.150 is not translated but rather rotated about its right leg at 95 r/min. What will be the level h in the left leg if $L = 18$ cm and $D = 5$ mm?