problem ①:

calculate the specific weight density and specific gravity of liquid which weis 7N

Given:

volumn = 1L = $1/1000\ m^3$

weight = 7N

To find:

⇒ w = ?

ρ = ?

S = ?

Sol

$w = w/v$

$= 7/1/1000$

weight = 7000 N/m^3

⇒ $\rho = m/v$

$w = \rho \times g$

$w/g = \rho$

$\rho = w/g = 7000/9.8 = 713.5\ kg/m^3$

Density = 713.5

⇒ $S = 7000/1000 \times 9.81$

$S = 0.71$