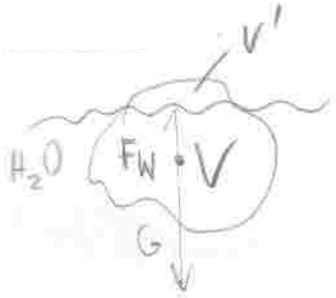

$\rho_{ICE} = 0{,}9167 \left[\frac{g}{cm^3}\right] = 0{,}9167 \cdot 10^3 \left[\frac{kg}{m^3}\right]$

$\rho_{H2O} = 1 \frac{g}{cm^3} = 1000 \left[\frac{kg}{m^3}\right]$

Note:

ρ_{ICE} - density of water in solid state/density of ice

ρ_{H2O} - density of water in fluid state

To make possible be iceberg's pick above water level. Buoyancy force of iceberg part which is under water level has to in equilibrium with its gravity force.

$$G = \rho_{ICE} \cdot V \cdot g$$

$$F_W = \rho_{H_2O} \cdot (V - V') \cdot g$$

$$G = F_W$$

$$\rho_{ICE} \cdot V \cdot g = \rho_{H_2O} \cdot V \cdot g - \rho_{H_2O} \cdot V' \cdot g \quad / : g$$

$$\rho_{ICE} \cdot V = \rho_{H_2O} \cdot V - \rho_{H_2O} \cdot V'$$

$$\rho_{H_2O} \cdot V' = \rho_{H_2O} \cdot V - \rho_{ICE} \cdot V$$

$$V' = \frac{(\rho_{H_2O} - \rho_{ICE})}{(\rho_{H_2O})} \cdot V$$

$$V' = 0{,}0833\ V$$