

- Bernoulli

1. $\rho \cdot H$
 $\rho \cdot \mu$
 $\rho \cdot H$
 $\rho \cdot \mu$

2. $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$

3. $\rho \cdot \mu$ Bernoulli, $\rho \cdot \mu$
 $\rho \cdot \mu^2 + 2p + 2gh =$
 $\rho \cdot \mu^2 + p + 2gh =$

4. Bernoulli $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$

5. $\rho \cdot \mu$ Torricelli, $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$

6. Bernoulli $\rho \cdot \mu$

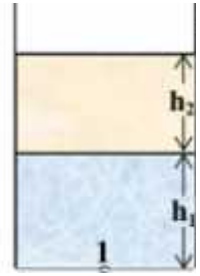
7. $\rho \cdot \mu$
 $80J/L.$
 $120J/L.$
 $\rho \cdot \mu$
 $\rho \cdot \mu$
 $\rho \cdot \mu$
 $40J/L.$
 $200J/L.$
 $200J/L.$
 $\rho \cdot \mu$

9.

$$\rho_1 h_1 + \rho_2 h_2 = \rho_1 h_1 + \rho_2 h_2$$

$$v_1 = \sqrt{2gh_1} \quad v_2 = \sqrt{2g(h_1 + h_2)}$$

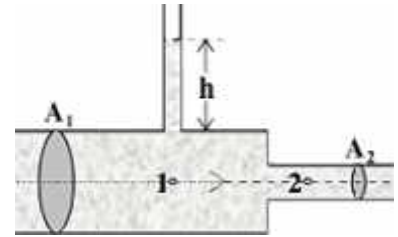
$$v_1 = \sqrt{\frac{2g(\rho_1 h_1 + \rho_2 h_2)}{\rho_1}}$$



10.

$$\rho_1 v_1^2 + \rho_2 v_2^2 = \rho_1 v_1^2 + \rho_2 v_2^2$$

$$gh + \frac{1}{2}\rho(v_1^2 - v_2^2) = p_2 - p_1 + \frac{1}{2}\rho(v_1^2 - v_2^2)$$



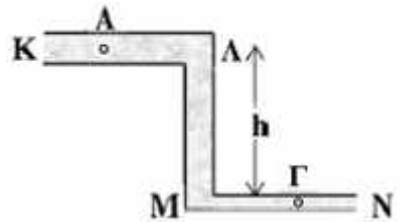
11.

$$p_A - p_B = \rho g h$$

$$p_A - p_B = \Delta p$$

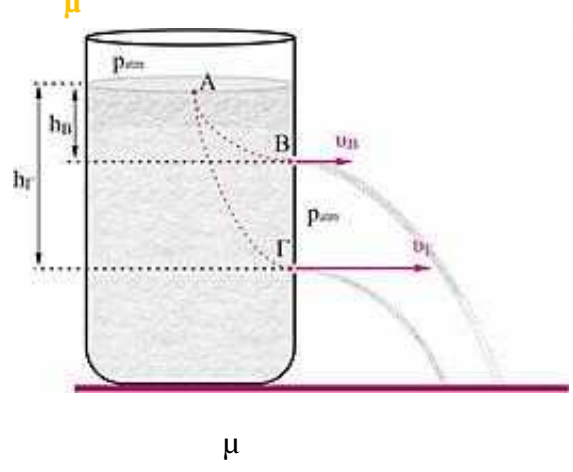
$$p = p'$$

$$p < p'$$



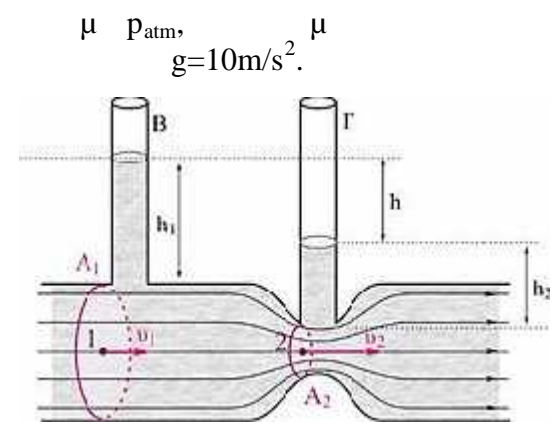
1.

$h = 0,2 \text{ m}$
 $S = 3 \cdot 10^{-4} \text{ m}^2$



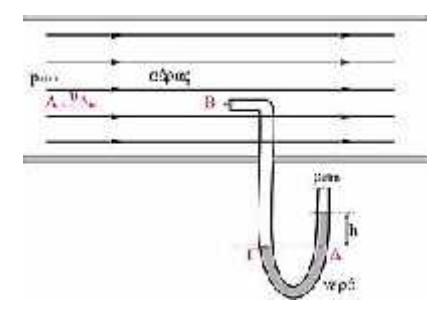
2.

Ventouri).
 $h = 10 \text{ cm}$

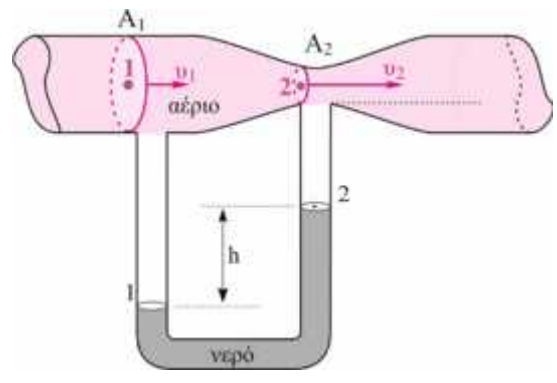


3.

$h = 10 \text{ cm}$
 $\rho_{\text{atm}} = 10^5 \text{ N/m}^2$
 $g = 10 \text{ m/s}^2$
 $\rho = 1,25 \text{ kg/m}^3$
 $\rho = 1000 \text{ kg/m}^3$



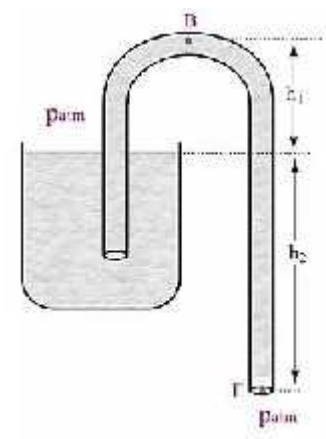
9. $\rho_1 = \rho_2 = \rho = 1000 \text{ kg/m}^3$
 $A_1 = 12 \text{ cm}^2$
 $h = 6,75 \text{ cm}$
 $N = 1$



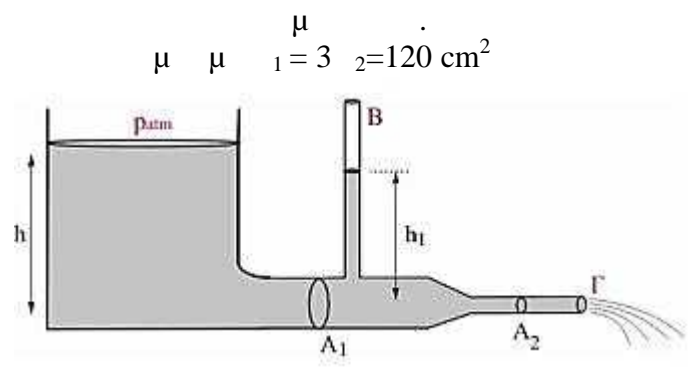
$g = 10 \text{ m/s}^2$
 $\rho = 1000 \text{ kg/m}^3$

1 min.
 $= 0,5 \text{ kg/m}^3$

10. $h_1 = 0,3 \text{ m}$, $h_2 = 0,45 \text{ m}$
 $p_{\text{atm}} = 10^5 \text{ N/m}^2$, $g = 10 \text{ m/s}^2$
 $\rho = 1.000 \text{ kg/m}^3$

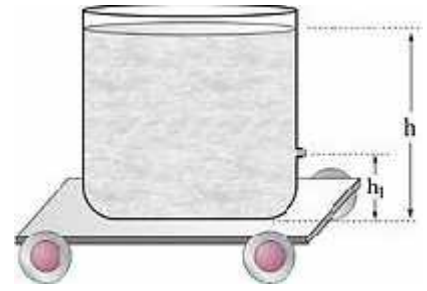


11. $h = 1,8 \text{ m}$
 p_1
 h_1
 $p_{\text{atm}} = 10^5 \text{ N/m}^2$, $g = 10 \text{ m/s}^2$
 $\rho = 1.000 \text{ kg/m}^3$



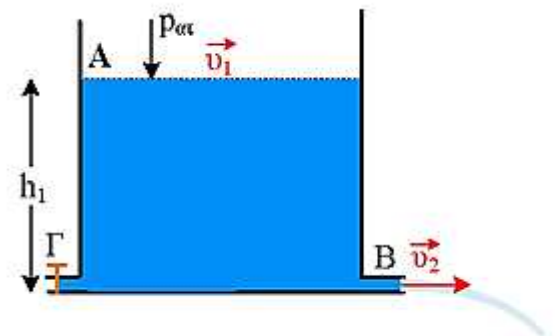
12.

$h = 0,5 \text{ m}$
 $h_1 = 5 \text{ cm}$
 $S = 40 \text{ mm}^2$
 $t = 0$
 $m = 10 \text{ kg}$
 $g = 10 \text{ m/s}^2$, $\rho = 1000 \text{ kg/m}^3$



13.

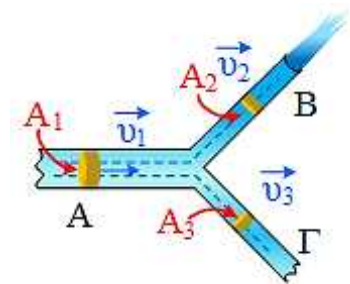
$v_1 = 10 \text{ m/s}$
 $v_2 = 10 \text{ m/s}$
 h_1
 $g = 10 \text{ m/s}^2$



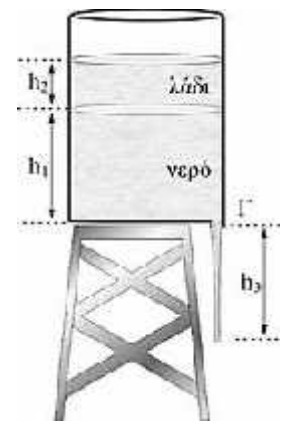
$h = 3,75 \text{ m}$

14.

$v_1 = 5 \text{ m/s}$
 $v_2 = 25 \text{ m/s}$
 $p = 10^5 \text{ N/m}^2$
 $\rho = 10^3 \text{ kg/m}^3$

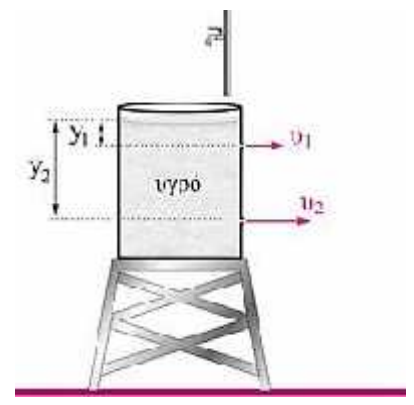


15. $\rho_1 = 1000 \text{ kg/m}^3$
 $\rho_2 = 800 \text{ kg/m}^3$
 $h_1 = 1,4 \text{ m}$ $h_2 = 0,5 \text{ m}$
 $h_3 = 1,4 \text{ m}$
 $g = 10 \text{ m/s}^2$ $p = 10^5 \text{ N/m}^2$

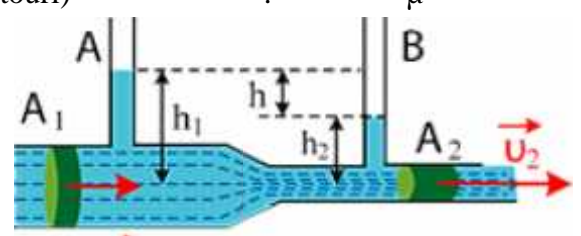


16. $h = 2 \text{ m}$
 $S = 1,2 \text{ m}^2$

17. $y_1 = 0,2 \text{ m}$ $y_2 = 0,8 \text{ m}$
 $S = 0,1 \text{ cm}^2$
 $g = 10 \text{ m/s}^2$

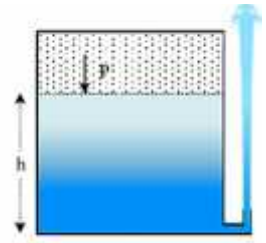


18. Ventouri
 $A_1 = 4 A_2$
 $h = 12 \text{ cm}$
 $t = 2 \text{ h}$
 $\rho = 10^3 \text{ kg/m}^3$
 $g = 10 \text{ m/s}^2$



19.

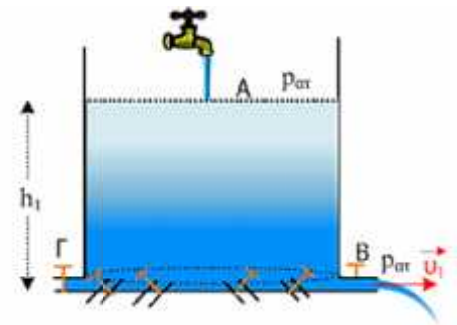
$\rho = 1000 \text{ kg/m}^3$ $h = 5 \text{ m}$ $p = 3 \cdot 10^5 \text{ N/m}^2$



$g = 10 \text{ m/s}^2$ $\rho = 800 \text{ kg/m}^3$ $p = 10^5 \text{ N/m}^2$

21.

$S = 2 \text{ cm}^2$ $Q = 0,8 \text{ L/s}$



$g = 10 \text{ m/s}^2$ $h_2 = 0,2 \text{ m}$

22.

$S_1 = 3 \text{ cm}^2$ $S_2 = 12 \text{ cm}^2$ $S = 0,288 \text{ m}^2$
 $h = 1,8 \text{ m}$ $t = 0$
 $v = 9 \text{ m/s}$ $p = 10^5 \text{ N/m}^2$ $g = 10 \text{ m/s}^2$ $\rho = 10^3 \text{ kg/m}^3$
 1 min

