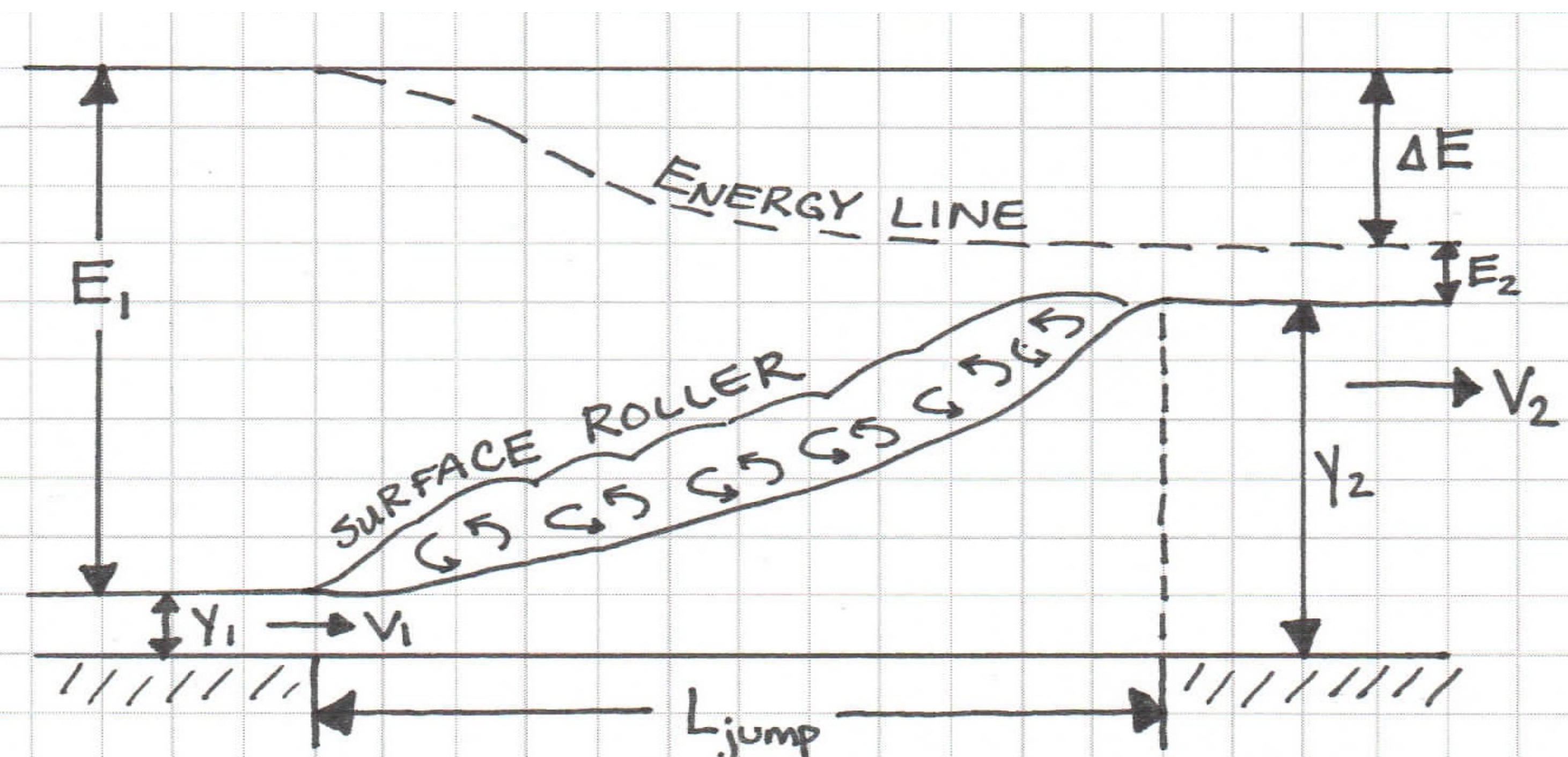
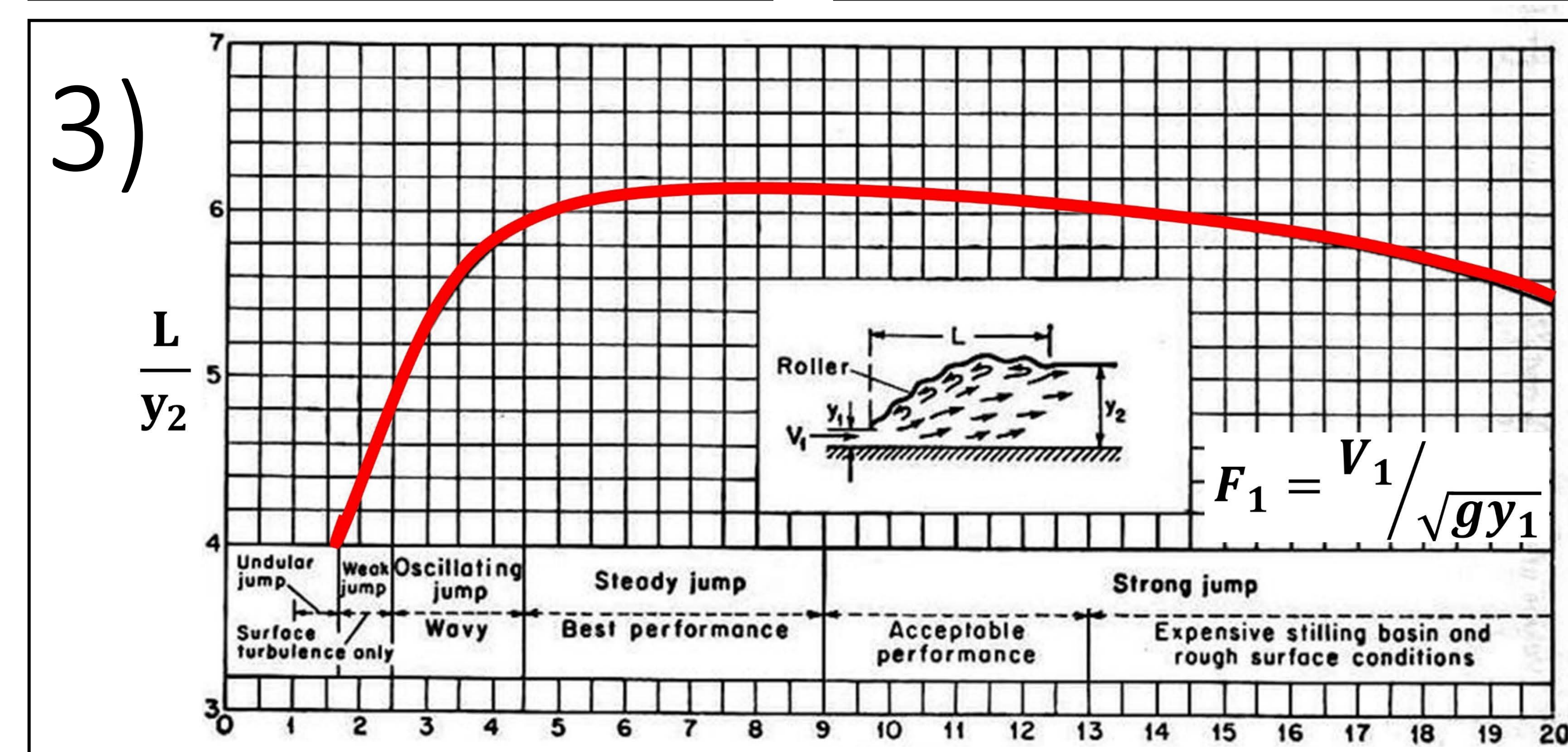


1° ΥΔΡΑΥΛΙΚΟ ΑΛΜΑ



$$1) h_L = \frac{(y_2 - y_1)^3}{4y_1y_2}$$

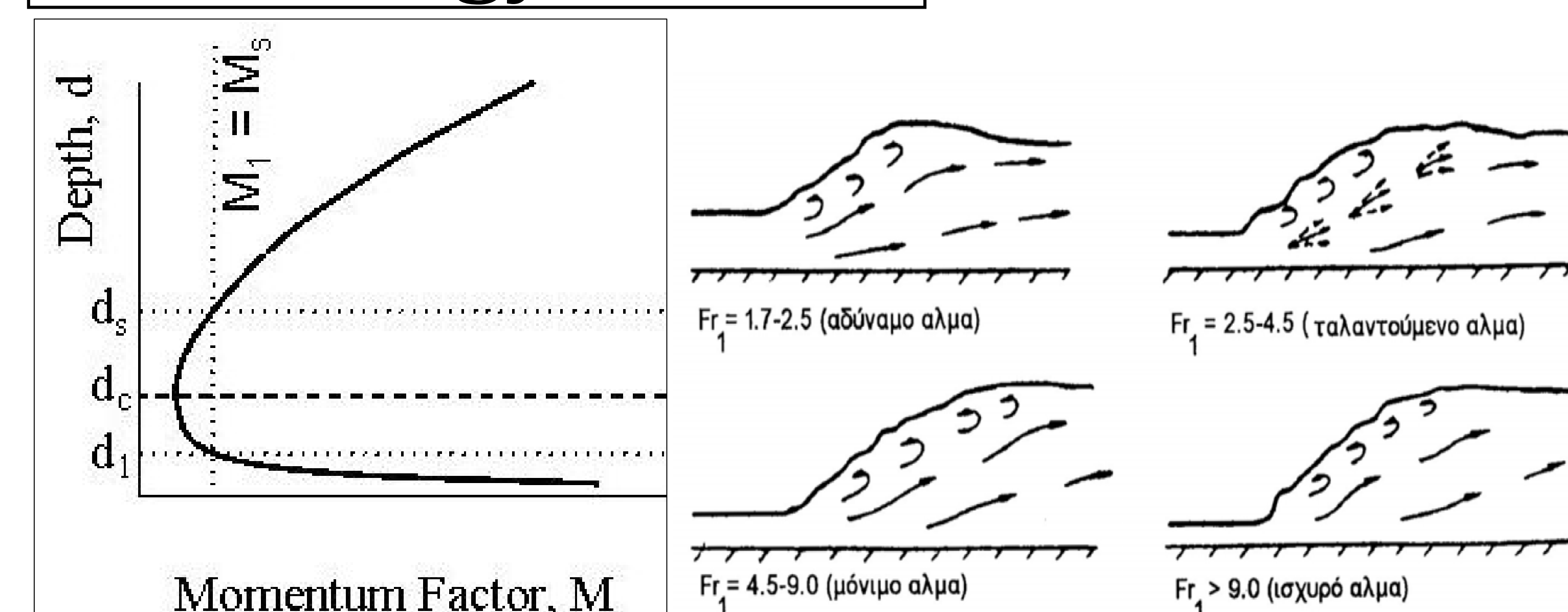
$$2) Fr = \frac{V}{\sqrt{g \cdot y}}$$



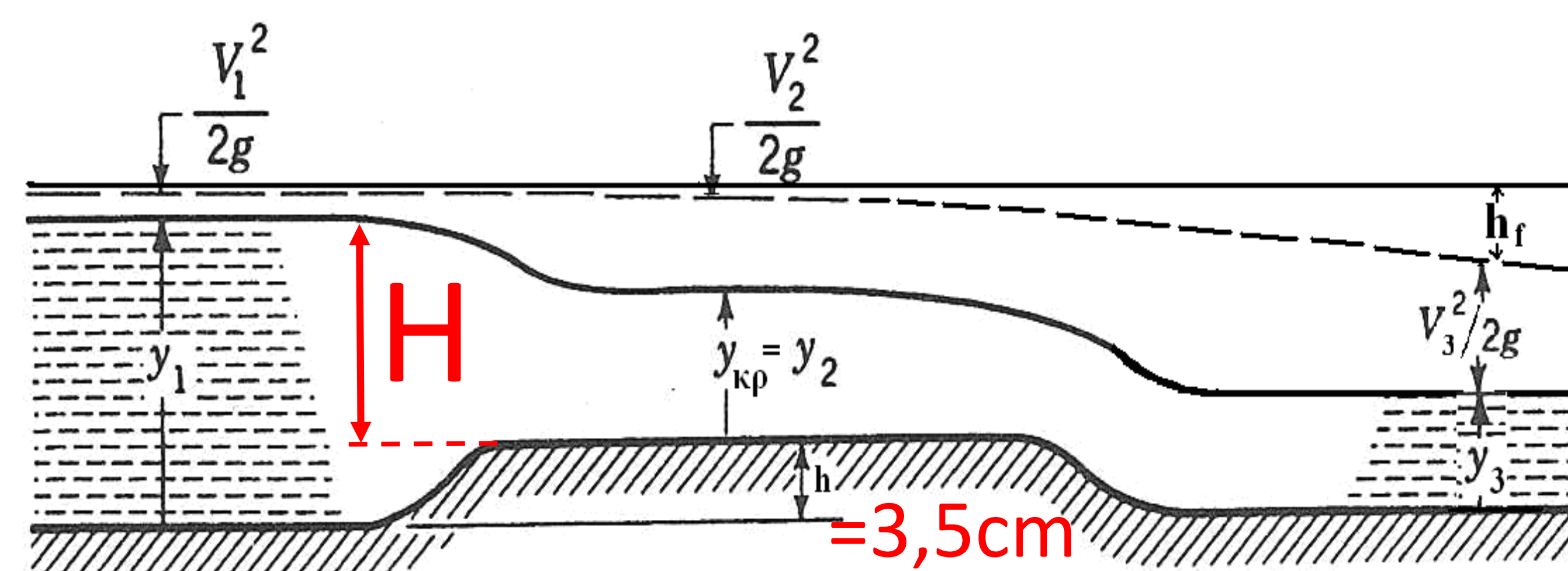
$$4) y_2 = -\frac{y_1}{2} + \sqrt{\left(\frac{y_1}{2}\right)^2 + \frac{2 \cdot V_1^2 \cdot y_1}{g}}$$

$$5) M = \frac{q^2 b}{gy} + \frac{y^2}{2} b$$

b: πλάτος αγωγού = 0,015m
q: ειδική παροχή



2° ΥΠΕΡΧΕΙΛΙΣΤΗΣ ΕΥΡΕΙΑΣ ΣΤΕΨΗΣ



$$1) Q = H^{3/2}$$

$$2) a \approx 1,67 \cdot L$$

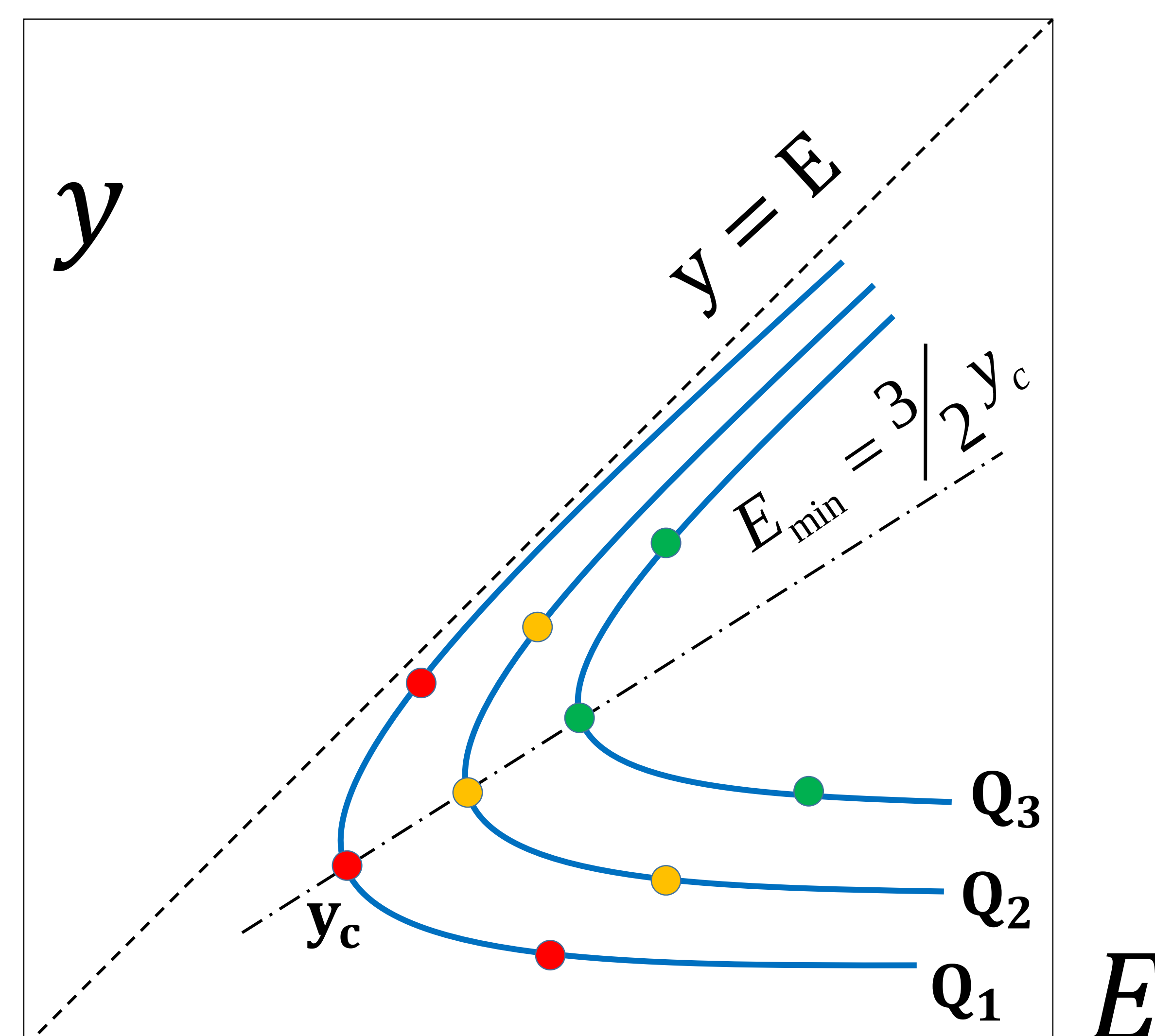
(L=0,015m)
% απόκλιση

$$3) Q_{\theta \epsilon \omega \rho} = ?$$

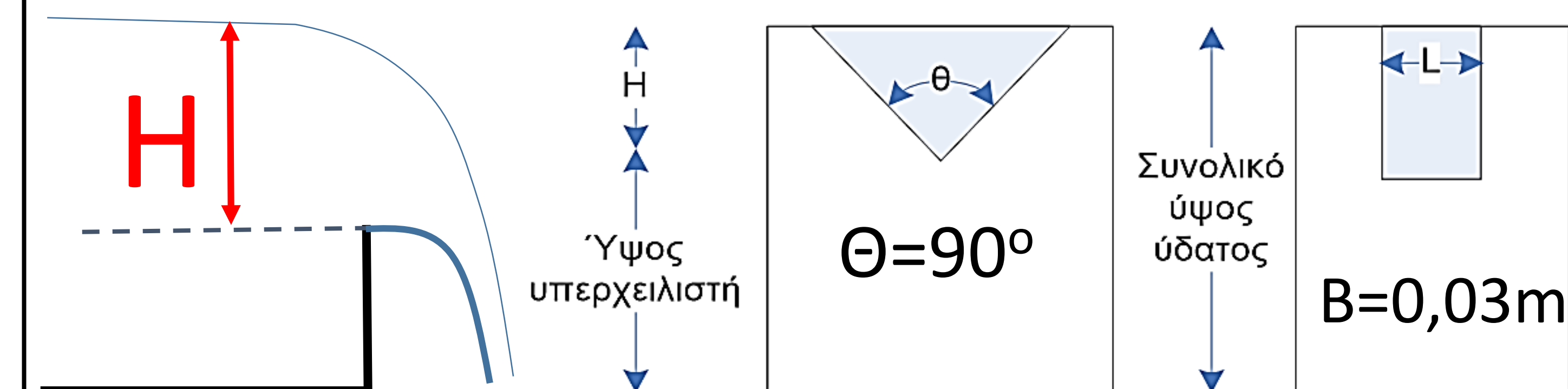
$$y_c = \left(\frac{q^2}{g} \right)^{1/3}$$

$$Q = L \cdot q$$

$$4) E = y + \frac{V^2}{2g} = y + \frac{q^2}{2gy^2}$$



3° ΡΟΗ ΠΑΝΩ ΑΠΟ ΟΡΘΟΓΩΝΙΚΟ & ΤΡΙΓΩΝΙΚΟ ΥΠΕΡΧΕΙΛΙΣΤΗ



$$1) Q = H^{3/2}$$

$$\alpha_{\text{ορθ}} = C_d \frac{2}{3} B \sqrt{2g}$$

$$C_{d,\text{ορθ}} = \frac{3\alpha_{\text{ορθ}}}{2B\sqrt{2g}}$$

$$Q = H^{5/2}$$

$$\alpha_{\text{τρ}} = C_d \frac{8}{15} \sqrt{2g} \cdot \tan\left(\frac{\theta}{2}\right)$$

$$C_{d,\text{τρ}} = \frac{15 \cdot \alpha_{\text{τρ}}}{8\sqrt{2g} \cdot \tan\left(\frac{\theta}{2}\right)}$$

$$2) Q_{act} \text{ Για } H = \begin{cases} \text{ορθογωνικό} & 0.02, 0.05, 0.1 \\ \text{τριγωνικό} & 0.01, 0.03, 0.05 \end{cases}$$

$$3) \text{ Σύγκριση } C_{d,\text{βιβλ.}} \text{ (Πιν. 1) με } C_{d,\text{πειρ.}}$$

$$4) \text{ Σύγκριση α με θεωρητική τιμή}$$

