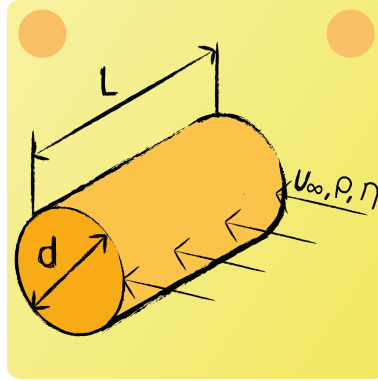


## Lecture 6 Question 2.1

Give an expression for the Reynolds number  $Re$ , for transverse flow around a cylinder.



The characteristic length in this case is the diameter  $d = \frac{1}{4}L$  of the cylinder, thus:

$$Re_d = \frac{u_{\infty} \cdot \rho \cdot d}{\eta} = \frac{u_{\infty} \cdot \rho \cdot L}{4 \cdot \eta}$$