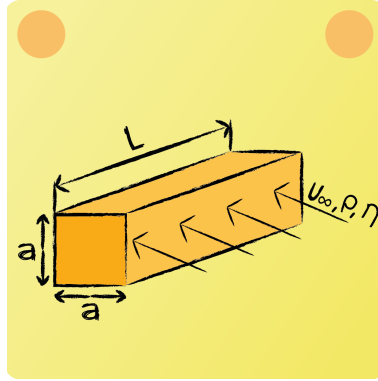




Lecture 6 Question 2.2

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



The characteristic length/diameter in this case is the height of the square $d = a$ of the cylinder, thus:

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