

Lecture 6 - Question 6

ρ	1.3 kg/m^3
c_p	$1006 \text{ J/kg}\cdot\text{K}$
λ	$0.024 \text{ W/m}\cdot\text{K}$
α	$1.8 \cdot 10^{-5} \text{ m}^2/\text{s}$
η	$1.7 \cdot 10^{-5} \text{ kg/m}\cdot\text{s}$

Consider an ideal fluid with the properties as listed in the figure. Determine the Prandtl number Pr .



$$Pr = \frac{\eta \cdot c_p}{\lambda} = 0.7126$$