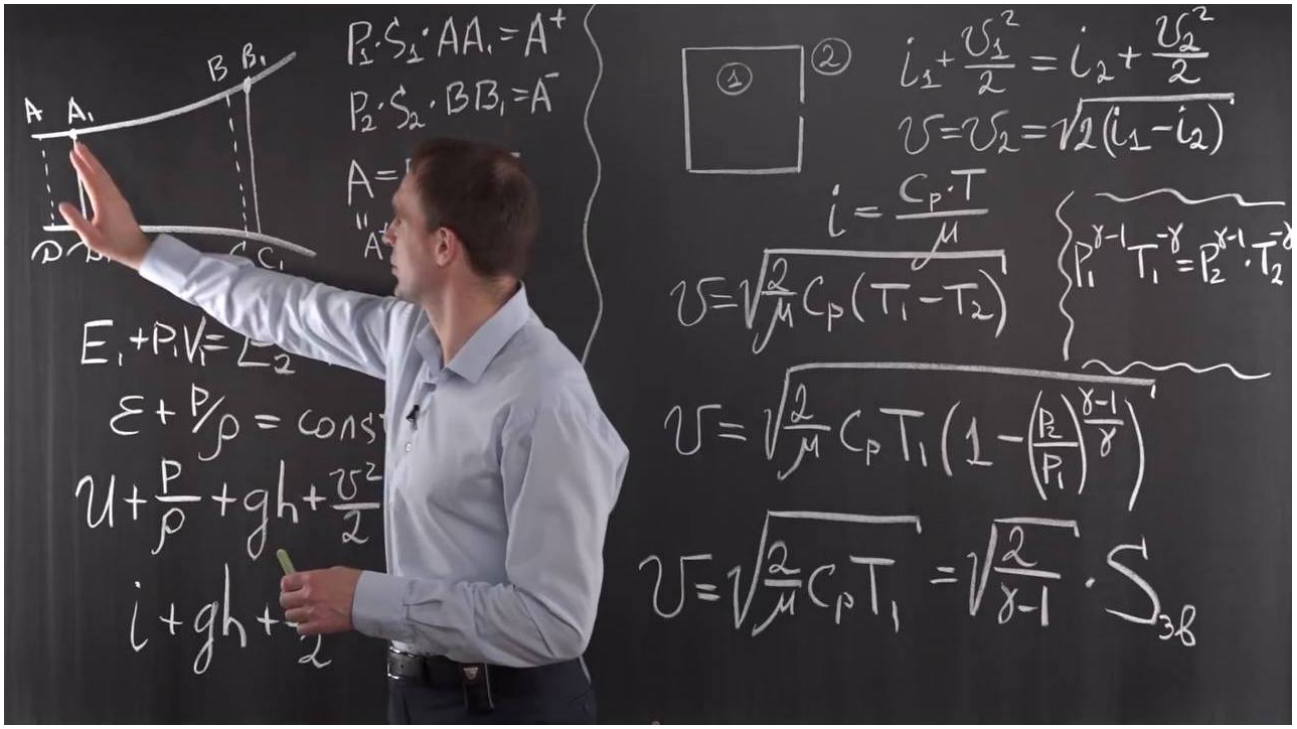
Hint 1


A A₁ B B₁
P₁·S₁·AA₁ = A⁺
P₂·S₂·BB₁ = A⁻
E₁ + P₁V₁ = E₂
ε + P/ρ = const
U + P/ρ + gh + υ²/2
i + gh +
i₁ + υ₁²/2 = i₂ + υ₂²/2
υ = υ₂ = √2(i₁ − i₂)
i = C_p·T/μ
υ = √(2/μ C_p(T₁ − T₂))
P₁^(γ−1) T₁^(−γ) = P₂^(γ−1) · T₂^(−γ)
υ = √(2/μ C_p T₁ (1 − (P₂/P₁)^((γ−1)/γ)))
υ = √(2/μ C_p T₁) = √(2/(γ−1)) · S_зв