

$$dq_{BC} = C_p dT + h dp$$

$$Q_{BC} = C_p (T_c - T_B) = \frac{Q}{\text{axis}}$$

$$S(Q_{DA}) = C_V \delta T + \ell \delta X^i$$

$$Q_{DA} = C_v (T_A - T_D) = \bar{Q}_{\text{gas}} \tilde{g}_{\text{gas}}$$

$$\eta = 1 + \frac{Q_{\text{loss}}}{Q_{\text{gen}}}$$

$$= 1 + \frac{C_V(T_A - T_B)}{C_p(T_E - T_B)}$$

$$\eta = 1 + \frac{(T_A - T_D)}{\gamma(T_C - T_B)}$$

: b g a وَلَا يَوْمَ عِبَارَةٌ

حول ادیاباتیکی A → B

$$\{ T_A \cdot V_A^{t-1} = T_B \cdot V_B^{t-1} \dots \quad \textcircled{1}$$

$$T_C V_C^{Y-1} = T_D V_D^{Y-1} \quad \dots \textcircled{2}$$

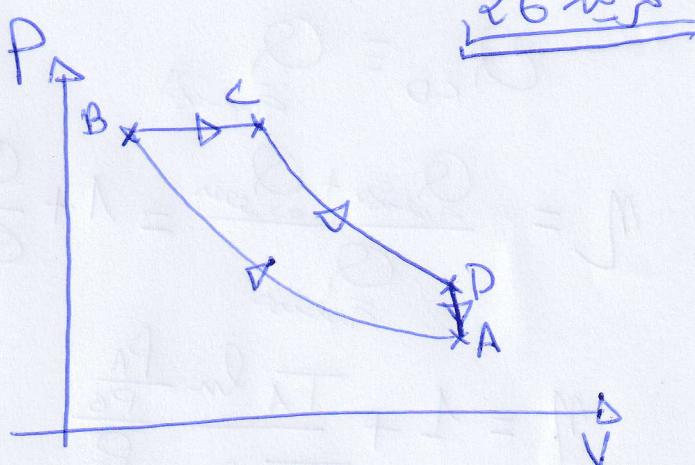
$$T_B = T_A \left( \frac{V_A}{V_B} \right)^{\gamma-1}$$

$$T_B = a^{\gamma-1} \cdot T_A$$

١٢٥ جماعة

$$T_c = T_A \left( \frac{P_A}{P_D} \right)^{\frac{u}{n+4}} = 300 \left( \frac{1}{3} \right)^{\frac{0.1u}{n+4}} = 410,31K$$

$$M = 1 - \frac{300}{410131} \approx 27\%$$



- احادي عبارة المردود تال٨٢

$$M = \frac{W}{G}$$

$$\Delta U_{\text{af}} = W + Q_{\text{abs}} + Q_{\text{sees}} = 0$$

$$W = -Q_{\text{excess}} - Q_{\text{seeds}}$$