

$$6) R = 1 - \frac{Q_B}{Q_A} \rightarrow \eta = 1 - \frac{200}{300} = \boxed{33\%}$$

$$\frac{Q_B}{Q_A} = \frac{T_B}{T_A} \rightarrow \frac{200}{300} = \frac{300}{500} \rightarrow \frac{2}{3} \neq \frac{3}{5} \text{ Irreversible}$$

$$7) \frac{Q_B}{Q_A} = \frac{T_B}{T_A}$$

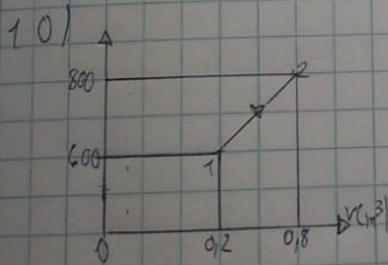
$$\frac{100}{150} = \frac{T_B}{450}$$

$$T_B = 300$$

$$8) 127 + 273 = 400, 27 + 273 = 300$$

$$R = \frac{100 - 300}{400} = \boxed{25\%}$$

9)



$W = \text{área del trapecio}$

$$W = \frac{600 + 800}{2} \cdot 0,6$$

$$W = \frac{1400}{2} \cdot 0,6$$

$$W = 700 \cdot 0,6$$

$$\boxed{W = 420 \text{ J}}$$