

★ 52. $T_{HOT} = 300^{\circ}C \Rightarrow 573 K$ -6-

$T_{COLD} = 25^{\circ}C \Rightarrow 298 K$

$$Eff = \frac{T_{HOT} - T_{COLD}}{T_{HOT}}$$

$$= \frac{573K - 298K}{573K}$$

$$Eff = 48\%$$

LUCKY FORGOT TO CONVERT
TO KELVIN!

54. BETTER INCREASE T_{HOT} OR
DECREASE T_{COLD}

START: $T_{HOT} = 400 K$
 $T_{COLD} = 300 K$

$$Eff = \frac{T_{HOT} - T_{COLD}}{T_{HOT}}$$

$$= \frac{400K - 300K}{400K}$$

$$= 25\%$$

$T_{HOT} \rightarrow 500 K$

$$Eff = \frac{500K - 300K}{400K}$$

$$= 40\%$$

$T_{COLD} \rightarrow 200 K$

$$Eff = \frac{400K - 200K}{400K}$$

$$= 50\%$$

BETTER

AMPAD

NOT ASSIGNED
2011