

### Question 29600

It is known that for ideal heat engine, efficiency is defined as  $\eta = \frac{T_1 - T_2}{T_1}$ , where  $T_1$  is the temperature of the hot reservoir, and  $T_2$  is the temperature of the cold reservoir (both in Kelvin).

Hence, for current heat engine  $\eta = 460 \frac{K}{953.15 K} \approx 0.48 = 48\%$ .