

7.

	O <sub>2</sub>	A	CO
mass kg	1	2	0.5
molar mass	32	40	28
no. kmols	$\frac{1}{32}$	$\frac{2}{40}$	$\frac{0.5}{28}$

$$\text{Total} = 3.5 \text{ kg}$$

from Table 2 Haywood

$$\text{Total} = 0.09911 \text{ kmol.}$$

$$\text{Average molar mass} = \frac{\text{no. kg}}{\text{no. kmols}} = \frac{3.5}{0.09911} = 35.315 \text{ kg/kmol}$$

$$R = \frac{\bar{R}}{M} = \frac{8.3143}{35.315} = \underline{\underline{0.235 \text{ kJ/kg K}}}$$