## CE 329 Fall 2015

## Assignment 2

## Problem Statement

Suppose a mixture of 3 moles of steam and 1 mole of carbon monoxide is going to react according to reaction (1) to produce a half mole each of hydrogen and carbon dioxide. The reaction will take place at $250^{\circ} \mathrm{C}$ and 322 psia. Calculate the standard heat of reaction at $250^{\circ} \mathrm{C}$ and 322 psia.

$$
\begin{equation*}
\mathrm{CO}+\mathrm{H}_{2} \mathrm{O} \rightleftarrows \mathrm{CO}_{2}+\mathrm{H}_{2} \tag{1}
\end{equation*}
$$

