1. **STUDY CHECK**

Write down the forward and reverse reactions for the reaction:

$$CO(g) + O_2(g) \rightleftharpoons CO_2(g)$$

▶Answer: $CO(g) + O_2(g) \longrightarrow CO_2(g)$ and $CO(g) + O_2(g) \longleftarrow CO_2(g)$

Show work:

Write just the final answer here:

2. **STUDY CHECK**

The value of K_c for $F_2(g) \rightleftharpoons 2\,F(g)$ at 500K is 7×10^{-13}. Indicate whether the equilibrium mixture will contain mostly reactants, mostly products of both.

▶Answer: mostly reactants.

Show work:

Write just the final answer here:

3. **STUDY CHECK**

Write down the expression of K_c for the following reaction:
$Pb^{2+}_{(Aq)} + 2\,I^{-}_{(Aq)} \rightleftharpoons PbI_2(s)$.

▶Answer: $\frac{1}{\left[Pb^{2+}\right]\cdot\left[I^{-}\right]^2}$

Show work:

Write just the final answer here:

4. **STUDY CHECK**

For the following reaction

$$SO_2Cl_{2(g)} \rightleftharpoons SO_{2(g)} + Cl_{2\ (g)}$$

The value of K_p at 300K is 0.05. Calculate the value of K_c at the same temperature.

▶Answer: 2×10^{-3}

Show work:

Write just the final answer here: