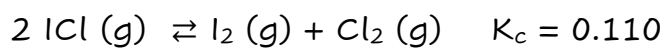


Equilibrium Problems Part 1

1. A sample containing 0.500 moles of ICl was placed into a 5.00 L flask and decomposed at 500 °C.



Calculate the equilibrium concentrations of all species, ICl, I₂, and Cl₂.

2. The reaction $\text{H}_2(\text{g}) + \text{CO}_2(\text{g}) \rightleftharpoons \text{H}_2\text{O}(\text{g}) + \text{CO}(\text{g})$ has $K_c = 0.106$ at 705 K. Initially, 0.632 M CO₂ and 0.570 M H₂ were allowed to react. Calculate the concentrations of all species at equilibrium.