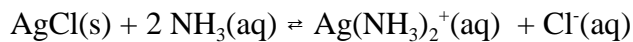


Quiz questions chapter 13 A

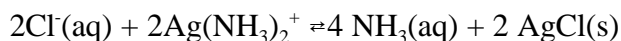
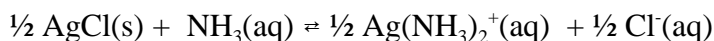
1. I have the reaction



A. Write the equilibrium expression for the above reaction

B. the K for this reaction is 2.8×10^{-3} , but what are the units?

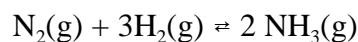
C. What are the K's for the following reactions



D. If the concentrations of all the reactants and products are .001 M is the reaction at equilibrium?

“““	”	.01
“	”	.1

2. The Haber reaction is used to make ammonia



K expressed in units of concentration is $3.8 \times 10^4 \text{ L}^2/\text{mol}^2$ at 25°C

A. What is the K when expressed in units of pressure (at 25°C)?

B. If I have 3 moles of each of the gasses in a 5 L vessel, is the vessel at equilibrium?

C. If I have 0.1 atm pressure of each gas, is the system at equilibrium?