ICE Table Calculations

Work with your group to solve the following problems. Use the equilibrium expression for each reaction and show all of your work on a separate piece of paper. You may be asked to put your solution on the board.

1. 4 M of A and 8 M of B are placed in a container. When equilibrium is established, the flask contains 4 M of C. What is Keq?

A (g) + 3 B (g)  2 C (g)

**I**nitial

**C**hange

**E**quilibrium

1. 4.0 mol of NO2 is added to a 2.0 L flask. After a while, equilibrium is attained. At equilibrium, 0.50 mol of NO is found. What is Keq?

2 NO(g) + O2(g)  2 NO2(g)

**I**nitial

**C**hange

**E**quilibrium

1. At a particular temperature, Keq for the following equilibrium system is 55.6. Initially, 0.200 M of H2 and 0.200 M of I2 are placed in a container and allowed to come to equilibrium. Calculate the equilibrium [HI].

H2(g) + I2(g)   2 HI(g)

**I**nitial

**C**hange

**E**quilibrium