1. Given the reaction: 2SO2(g) + O2(g) <-> 2SO3(g)

What is the expression for the equilibrium constant (Kc) using the law of mass action?

1. Given the reaction: 2Al(s) + 3MnSO4(aq) <-> Al2(SO4)3(aq) + 3Mn(s)

What is the expression for the equilibrium constant (Kc) using the law of mass action?

1. For an equilibrium system with an equilibrium constant significantly greater than 1…
   1. The reactants are favored
   2. The products are favored
   3. Neither is favored
2. Given the reaction: 3A(g) + B(aq) <-> 2C(g) + 2D(g)

What is the equilibrium constant (Kc) given, at equilibrium, the concentrations in the closed system are [A] = 0.100 M, [B] = 0.0500 M, [C] = 0.400 M and [D] = 0.200 M?

1. Given the reaction: 2A(aq) + 2B(aq) <-> C(aq)

The closed system at 25oC starts out with [A] = 0.0200 M, [B] = 0.300 M, and [C] = 4.00 M. If the equilibrium constant for this system at Kc = 2.29 x 10-3 at 25oC, will this reaction shift to the reactants or the products side to achieve equilibrium?