

**CHM 111**  
**Quick Quiz - 3/15/04**

Name: \_\_\_\_\_

**Answer the question. [20]**

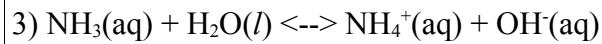
1) The equilibrium  $2NOBr(g) \rightleftharpoons 2NO(g) + Br_2(g)$  has an equilibrium constant ( $K_c$ ) value of  $3.07 \times 10^{-4}$  at  $24^\circ C$ . Does this reaction favor products or reactants at equilibrium?

• \_\_\_\_\_

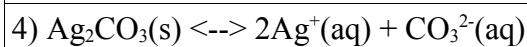
2) Define the term *chemical equilibrium*.

• \_\_\_\_\_  
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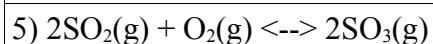
**Write concentration-based equilibrium constant expressions for the following reactions. [20]**



$K_c =$



$K_c =$



$K_c =$