**Additional questions on writing the equilibrium constant expression**

**Write the equilibrium constant expression for each reaction**

|  |  |
| --- | --- |
| 2NOCl(g) ⇌ 2NO(g) + Cl2(g) |  |
| 5CO(g) + I2O5(g) ⇌ 5CO2(g) + I2(g) |  |
| I2(g) + Br2(g) ⇌ IBr(g) |  |
| 2NO(g) + 2H2(g) ⇌ N2(g) + 2H2O(g) |  |
| Br2(g) + Cl2(g) ⇌ 2BrCl(g) |  |
| 2H2S(*g*) ⇌ 2H2(*g*) + 2S(s)  |  |
| AgCl(s) ⇌ Ag+(aq) + Cl-(aq) |  |
| N2O4(g) ⇌ 2NO2(g) |  |
| fluorine and chlorine gas combine to form ClF3 (g) |  |
| Cu2+(aq) + 4NH3(aq) ⇌ [Cu(NH3)4]2+(aq) |  |
| I2(g)+ 3Cl2(g)⇌ 2ICl3(g) |  |

Using the information provided in the table below, write the equation for each reaction

|  |  |
| --- | --- |
| Equilibrium expression | Equation |
| *K*c = [FeSCN2+]  [Fe3+][SCN-] |  |
| *K*c = [PCl5]  [PCl3][Cl2] |  |
| Kc = [NO]4[H2O]6 [O2]5[NH3]4 |  |

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