

Equilibrium: Calculating K_{eq} Name: _____

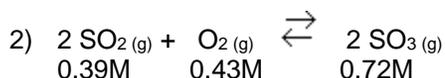
Notes Review:

- 1) When solving for the equilibrium constant (K_{eq}), what does it mean if...
- $K_{eq} > 1$ **product favored**
 - $K_{eq} < 1$ **reactant favored**
 - $K_{eq} = 1$ **concentration of the reactants and products are equal**

Directions for Calculations:

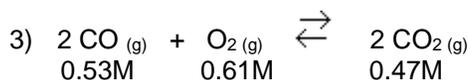
(A) Calculate K_{eq}

(B) Indicate if the equilibrium is product or reactant favored.



7.93

Product favored



1.29

Product favored

Theory Indicate if true or false. If false, then correct it.

4) Define equilibrium.

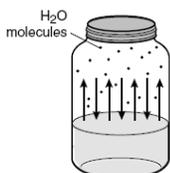
In a reversible reaction, when the rate of the forward reaction equals the rate of the reverse reaction.

5) Describe the concentrations of the reactants and products at equilibrium. Why would some people think the reaction has stopped?

At equilibrium the concentration of the reactants and products DO NOT CHANGE. (Note: this does not mean that they are necessarily equal to each other) Some people think that the reaction has stopped because they do not visually see anything changing.

6) Describe the equilibrium occurring in the graphic.

In the closed container, the rate of evaporation equals the rate of condensation.



Equilibrium: Calculating K_{eq} Name: _____

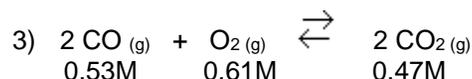
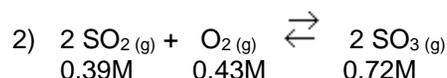
Notes Review:

- 1) When solving for the equilibrium constant (K_{eq}), what does it mean if...
- $K_{eq} > 1$ _____
 - $K_{eq} < 1$ _____
 - $K_{eq} = 1$ _____

Directions for Calculations:

(C) Calculate K_{eq}

(D) Indicate if the equilibrium is product or reactant favored.



Theory Indicate if true or false. If false, then correct it.

4) Define equilibrium.

5) Describe the concentrations of the reactants and products at equilibrium. Why would some people think the reaction has stopped?

6) Describe the equilibrium occurring in the graphic.

