1. What is the expression for the equilibrium constant of an aqueous solution of the oxoacid H-OA?

A. $K_a = (H-OA)(:OH^-)$
B. $K_a = (H_3O+)(H-OA)/(OA)$
C. $K_a = (H_3O+)(:OA^-)/(HOA)(H_2O)$
D. $K_a = (H_3O+)(:OA^-)/(HOA)$

2. 0.001 mol of a weak oxoacid H-OA is placed in 1.00 L water at 25°C. Before equilibrium is established, what is (H-OA)?

A. 0
B. 0.001
C. $10^{-7}$
D. More information is needed.

3. 0.001 mol of a weak oxoacid H-OA is placed in 1.00 L water at 25°C. Before equilibrium is established, what is (H3O+)?

A. 0
B. 0.001
C. $10^{-7}$
D. More information is needed.

4. 0.001 mol of a weak oxoacid H-OA is placed in 1.00 L water at 25°C. Before equilibrium is established, what is (:OH-)?

A. 0
B. 0.001
C. $10^{-7}$
D. More information is needed.

5. 0.001 mol of a weak oxoacid H-OA is placed in 1.00 L water at 25°C. After equilibrium is established, what is (H-OA)?

A. $\sim 0$
B. $\sim 0.001$
C. $\sim 10^{-7}$
D. More information is needed.

6. 0.001 mol of a weak oxoacid H-OA is placed in 1.00 L water at 25°C. After equilibrium is established, what is (H3O+)?

A. $\sim 0$
B. $\sim 0.001$
C. $\sim 10^{-7}$
D. More information is needed.