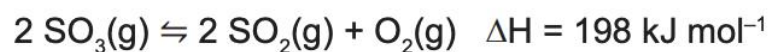17. In the conversion between sulfur dioxide and sulfur trioxide in a sealed vessel, the following equilibrium is established:

$$2\ SO_3(g) \leftrightharpoons 2\ SO_2(g) + O_2(g) \quad \Delta H = 198\ kJ\ mol^{-1}$$

For this system, which of the following statements about the equilibrium constant K is correct? K will

(a) increase if the temperature of the system is decreased.
(b) decrease if the partial pressure of $SO_2(g)$ is increased.
(c) increase if the temperature of the system is increased.
(d) increase if the pressure of the system is increased.