Le Châtelier's Principle

Explain how the following changes in reaction conditions will affect the position of the equilibrium below, and explain your reasoning.

$$A_{(g)} + B_{(aq)} \longleftrightarrow C_{(s)} \quad \Delta H_{rxn} = -453 \text{ kJ/mol}$$

1)   The pressure of A in the reaction chamber is increased.

2)   The temperature of the reaction is increased by 20^0 C.

3)   A catalyst is added to the system.

4)   As the reaction progresses, more of compound B is steadily added to the reaction chamber.

5)   An inhibitor is added to the reaction chamber.

6)   Argon gas is added to the reaction chamber, doubling the pressure.