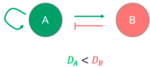


A)



B)

$$\frac{\partial A}{\partial t} = 5A - 6B + 1 - D_A \frac{\partial^2 A}{\partial x^2}$$

$$\frac{\partial B}{\partial t} = 6A - 7B + 1 - D_B \frac{\partial^2 B}{\partial x^2}$$

C)



D)

