

Chemical Kinetics Homework



$$\frac{dA}{dt} = -kAB$$

$$\frac{dB}{dt} = -kAB$$

$$\frac{dC}{dt} = kAB$$

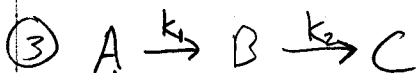
$$\frac{dD}{dt} = kAB$$



$$\frac{dA}{dt} = -kAB + kAB = 0$$

$$\frac{dB}{dt} = -kAB$$

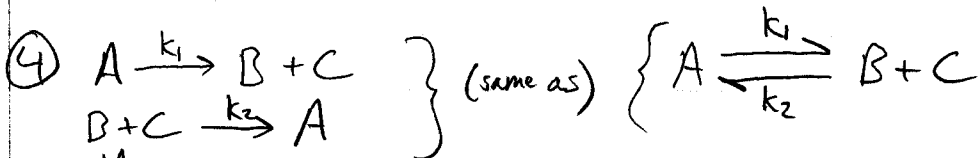
$$\frac{dC}{dt} = kAB$$



$$\frac{dA}{dt} = -k_1 A$$

$$\frac{dB}{dt} = k_1 A - k_2 B$$

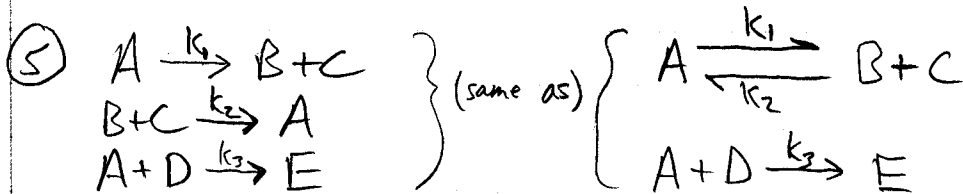
$$\frac{dC}{dt} = k_2 B$$



$$\frac{dA}{dt} = -k_1 A + k_2 BC$$

$$\frac{dB}{dt} = k_1 A - k_2 BC$$

$$\frac{dC}{dt} = k_1 A - k_2 BC$$



$$\frac{dA}{dt} = -k_1 A + k_2 BC - k_3 AD$$

$$\frac{dB}{dt} = k_1 A - k_2 BC$$

$$\frac{dC}{dt} = k_1 A - k_2 BC$$

$$\frac{dD}{dt} = -k_3 AD$$

$$\frac{dE}{dt} = k_3 AD$$