a.

$$\mu_1^A = \mu_2^B = 10, \ \mu_2^A = \mu_1^B = 12$$

$$\mu_{2}^{A} = \mu_{1}^{B} = 12$$

b.

$$\mu_1^A = \mu_2^B = 10, \, \mu_2^A = \mu_1^B = 20$$



