

Problem 4

Part a)

$$(x_0^A, x_S^A, x_C^A) = (10, 15, 15); (x_0^B, x_S^B, x_C^B) = (10, 15, 15). \quad r = 2; b^A = -b^B = 0.$$

Part b)

$$(x_0^A, x_S^A, x_C^A) = (10, 12, 20); (x_0^B, x_S^B, x_C^B) = (10, 18, 10). \quad p_S = \frac{5}{24}; p_C = \frac{1}{8}.$$

Part c)

$$(x_0^A, x_S^A, x_C^A) = (10, 12, 20); (x_0^B, x_S^B, x_C^B) = (10, 18, 10). \quad y^A = -y^B = -8; \\ b^A = -b^B = 1; r = 2; q = \frac{1}{8}.$$