1. Exercise 1 page 461 (Tirole)

2. Exercise 4 pages 461-462 (Tirole)

3. Multiproduct Monopoly
   A firm has monopoly power on the production of candies (good 1) and cookies (good 2). Candies and cookies are perfect complements. Thus, demand depends only on the total price: \( D_i(p_1, p_2) = D(p_1 + p_2) \) for all \( i = 1, 2 \). Let’s assume that the total cost can be split into 2 costs: \( C(q_1, q_2) = C(q_1) + C(q_2) \) where \( C(q_1) = cq_1 \) and \( C(q_2) = bq_2 \) and \( c > 0, b > 0 \).

   1. Write down the multiproduct monopolist maximization and solve it (determine the first order conditions).

   2. Determine the Lerner index for each product. What can you say?