Problem 3. Correction to the solution with the assumption that the buyer pays only cover charge.

The seller is profit maximizing, therefore, he would set up the pricing scheme in the way that gives him maximum profit. Since monopoly pricing leaves some consumer surplus to the consumer, this pricing scheme would not yield the maximum profit.

The seller, however, can extract all consumer surplus (given to the seller, however, can extract all consumer surplus) given that he knows the demand functions and can differentiate (and segment) among buyers, by doing bundling pricing in the following way:

1) set the number of tokens equal to the number of claims demanded under price = Me = 2

2) set cover charge equal to the consumer's total willingness to pay \( \text{Area } ABQD - x \) or

\[ \text{Area under demand curve up to a number of tokens} \]

Therefore, the solution to the one given earlier is incorrect. The correct solution is the following:

1) \( Q^* = 18 - 3 \cdot 2^2 = 12 \) — number of tokens

Cover charge = \( \frac{1}{2} \cdot 12 \cdot (6 - 2) + 2 \cdot 12 = 24 + 24 = 48 \) — cover charge

2) \( Q^A = 10 - 2 \cdot 2 = 6 \) — number of tokens

Cover charge = \( \frac{1}{2} \cdot 6 \cdot (5 - 2) + 2 \cdot 6 = 9 + 12 = 21 \)