3. (a) Placiona imports good X because its domestic equilibrium price is higher than the world price, therefore it would be inclined to buy good X cheaper from abroad.

(b) Placionia imports 300 units of good X (quantity demanded at Point N (350) minus quantity supplied at point T (50))

(c) (i) consumer surplus would change from area NHPw to area MHPt (a net change of PtMNFW).

(ii) producer surplus would change by area PtoKJFw.

(d) Because of the tariff, more of good X will be produced domestically, therefore employment in the industry will increase.
3. (a) Placonia imports good X. The domestic price of good X is that corresponding to point L, which is much higher than Pw. Therefore, it's natural that domestic consumers would want to consume good X at a much lower price, Pw. Thus, to satisfy the demand for good X at price Pw, Placonia would import good X.

(b) At a price of Pw, domestic suppliers are willing to supply only 50, but the Q demanded is 350. To meet those needs, Placonia imports 300 good X, the result of 350 - 50.

(c) As a result of the tariff, domestic suppliers would now supply more of good X at a higher price than before the tariff. Therefore, the producer surplus would increase by the area represented in P+KJPw. This area, P+KJPw, is exactly the same amount by which consumer surplus would decrease. The final area representing consumer surplus after the tariff would be HLK Pw.

(d) Employment in the domestic industry would increase. This is because the tariff allows for a higher price, resulting in an increase in the quantity of supply. To increase output, more workers are needed, and thus employment in the domestic industry of good X will increase due to the tariff.
3. a) It imports because its prices are lower in foreign markets. That is, prices in foreign markets are relatively cheaper (as compared to the domestic price).

   b) Imports → \( Q_x - Q_x = 350 - 50 = 300 \) units of good X

   c) It increases as after the tariff supply (domestic) increases from 50 units of good X (i.e., domestic output increases) and so domestic employment increases.

   \( Q_x = 50, \ Q_x = 100 \) in \( Q_x - Q_x = 100 - 50 = 50 \) units of X