(1) Export-biased growth

The country shown here has export-biased growth. Initially, prices are $P_0$, and the country maximizes the value of output by producing at $Q_0$. It exports good $Y$ and imports good $X$ to consume at point $D_0$, reaching the highest possible indifference curve ($I_0$), given the value of output.

Export-biased growth shifts the PPF outward and biased toward the production of good $Y$. At constant prices, the country produces more $Y$ and less $X$ (shown by the movement from $Q_0$ to $Q_1$). Consumption is now $D_1$, and represented by a higher indifference curve ($I_1$). Growth has improved the nation’s welfare. However, prices cannot remain at $P_0$, if this country is a large producer of good $Y$ in the world market. The increase in the output of good $Y$ (at constant prices) will shift the world relative supply of good $Y$ outward, reducing the price of good $Y$. This lower price of good $Y$ is shown by the steeper isovalue (i.e., price) line $P_2$. Producers respond to the falling price of good $Y$ by producing more $X$ and less $Y$ (shown by the movement from $Q_1$ to $Q_2$). Consumers respond by increasing their relative consumption of good $Y$ at a given level of welfare ($I_1$). This substitution effect is shown by the position of the new consumption point. $D_2$ lies to the left of $D_0$; the ray showing proportionate increases in the consumption of both goods when income expands. Overall, we see that welfare is depressed by the fall in the terms of trade ($I_2$ < $I_0$). However, the reduction in the terms of trade has not canceled out all of the benefits of growth (i.e., increased productive capacity) because $I_2$ < $I_0$. 

Answers to Questions from Chapter 5
(2) a. The relative price of textiles to computers facing both consumers and producers will be 25% higher than the relative price on world markets. The relative price of computers will be comparatively lower at Home than in world markets.

b. Home producers will reduce production of computers and expand production of textiles. Home consumers will increase their demand for computers and reduce their demand for textiles. The new equilibrium price of computers relative to textiles will be higher than the pre-tariff price. The size of the shifts of the relative demand and supply curves must be determined before we can state whether there is an overall expansion or contraction in the equilibrium quantity of computers relative to textiles and whether the relative price adjustment exceeds the 25% tariff.

c. Home's terms of trade improve.

d. The outcome depends on the large country assumption. Unlike a large country, a small country cannot achieve substantial changes in world relative prices or quantities by imposing a tariff.