## Homework 2

## Answer Key

1. The increase in immigration shifts the supply curve to the right by 11%. The relatively large percentage change in supply, which resulted in a relatively small decrease in the wage, would suggest that demand is elastic relative to supply. The situation is depicted in Figure 3.6.



Quantity of Labor Supply

2. Tax incidence for almonds:

$$12/(12 + 0.47) = 0.96;$$

for cotton,

$$0.73/(0.73 + 0.68) = 0.52;$$

for processing tomatoes,

$$0.64/(0.64 + 0.26) = 0.71.$$

3.

a. Given a slope of  $\epsilon Ap^{(\epsilon-1)}$ , elasticity is  $\epsilon Ap^{(\epsilon-1)*p/Q}$ . Substitute in Q=Ap<sup>^</sup>  $\epsilon$  to get  $\epsilon Ap^{(\epsilon-1)*p/(Ap^{\epsilon})}$ , which equals p.

b. The calculation is the same as in part a.

4. This question is answered in the back of your textbook, on page A-28.

5.

a. p\* = 5, Q\* = 10

b.  $\varepsilon = -1/10$ ,  $\eta = 1$ 

c. after the tax, Q = 9.82, before tax price (received by sellers) is \$4.91, and the price including tax (paid by buyers) is \$5.91. Almost all of the tax is paid by buyers, the inelastic side of the market.

d. No.