Unit 2

Ch 3 Homework Key

#3 Solution in text

#5 Solution in text

#11 Boston: $U_{max} \Rightarrow \frac{MU_A}{MU_T} = MRS = \frac{P_A}{P_T} = 2$

San Diego: $U_{max} \Rightarrow \frac{MU_A}{MU_T} = MRS = \frac{P_A}{P_T} = \frac{1}{2}$

$\Rightarrow$ MRS is higher in Boston

#12 Budget line slopes = $\frac{P_{suv}}{P_{car}}$

If indifference curves are 'normal', need more info to determine optimal Q's of SUV's and cars for each.

Nigel will buy more cars

#24 $MRS = \frac{3g_2}{g_1} = \frac{MU_1}{MU_2} = \frac{P_1}{P_2} = \frac{1}{2} \Rightarrow g_1 = 6g_2$

Sub into budget eqn $\Rightarrow 100 = 2g_2 + 1g_1$

$\Rightarrow 100 = 2g_2 + 5(6g_2)$

$\Rightarrow 100 = 32g_2 \Rightarrow g_2 = 3.125, g_1 = 7.5$
9. See Figure 9.10. With the price increase, producers gain $A$, but lose $D$. The payment $x$ must be enough to compensate producers for their net loss from the price increase ($x = D - A$). With this payment, producer welfare is unchanged, but consumer welfare falls by $A + B$. With a price support program, consumer surplus would be the same as with the lump sum payment program, but producer surplus would be $A + B + C + D + E + F$. A quota set at $Q_1$, producer surplus is $A + B + C + D + E$. With the quota set at $Q_2$, producer surplus is $A + C$.

12. See Figure 9.13. The government prefers the tariff. In either case, consumer surplus is reduced to area $A$. With the quota, the government collects no revenue. With the tariff, the government collects $B + C + D + E$ as revenue.

30 Solution in text

34 Solution in text