Fall 2016 Andrew L. H. Parkes, Ph. D.

Problem Set 1

15 points

Due September 13, 2016

**On a separate sheet of paper please answer the following questions. Use one graph to analyze the following questions.**

1. The Kona coffee (1/2 pound bags) market is represented by the following demand and supply schedules. The prices are in dollars and the quantities are in hundreds of ½ pound bags per day.

|  |  |  |
| --- | --- | --- |
| **Price** | **Qd** | **Qs** |
| 1 | 55 | 19 |
| 2 | 50 | 23 |
| 3 | 45 | 27 |
| 4 | 40 | 31 |
| 5 | 35 | 35 |
| 6 | 30 | 39 |
| 7 | 25 | 43 |
| 8 | 20 | 47 |
| 9 | 15 | 51 |

a) Graph these curves, D for the demand curve, S for the supply curve, and make sure to label everything. Label the initial equilibrium Q1, P1.

b) What is the equilibrium price and quantity?

c) What is the value of the surplus, equilibrium or shortage if there is a price floor at $6? Make sure to write the condition of the market AND the value(s).

d) What is the value of the surplus, equilibrium or shortage if there is a price floor at $4? Make sure to write the condition of the market AND the value(s).

e) Draw and label the price floor that is effective on the y-axis (i.e. which price floor matters – is binding or creates a surplus/shortage) – **Pf**. Also label the quantities demanded and supplied on the x-axis (**QD**and **QS**).

f) Suppose that the supply of Kona coffee decreases due to land being used for condominiums instead of coffee such that production (quantity supplied) decreases at each price by 9 hundred ½ pound bags per day. Draw the new curve and label it S2. Label this equilibrium Q2, P2.

g) What happens to the equilibrium quantity? The equilibrium price? Is the equilibrium affected by the price floor? If so how (is there a shortage or surplus)?