

MA 110 SECTION 1.2 SURPLUS AND SHORTAGE

HOMEWORK: SEE EXTRA PROBLEMS

1. The corn market data is provided in the table:

U.S. Corn Supply and Demand			
Year	Supply (mil bu)	Demand (mil bu)	Price (\$/bu)
1998	9,800	9,300	1.94
1999	9,400	9,500	1.86

- A. Find the linear supply equation of the form $S = mp + b$, where S is the number of millions of bushels of corn supplied and p is price per bushel.
- B. Find the linear demand equation of the form $D = mp + b$, where D is the number of millions of bushels of corn demanded.
- C. Find the equilibrium point.
- D. Graph the supply equation, demand equation, and equilibrium point in the same coordinate system.
- E. For what prices is there a shortage?
- F. Find the price when demand is 9000. Is there a surplus or shortage at this price?