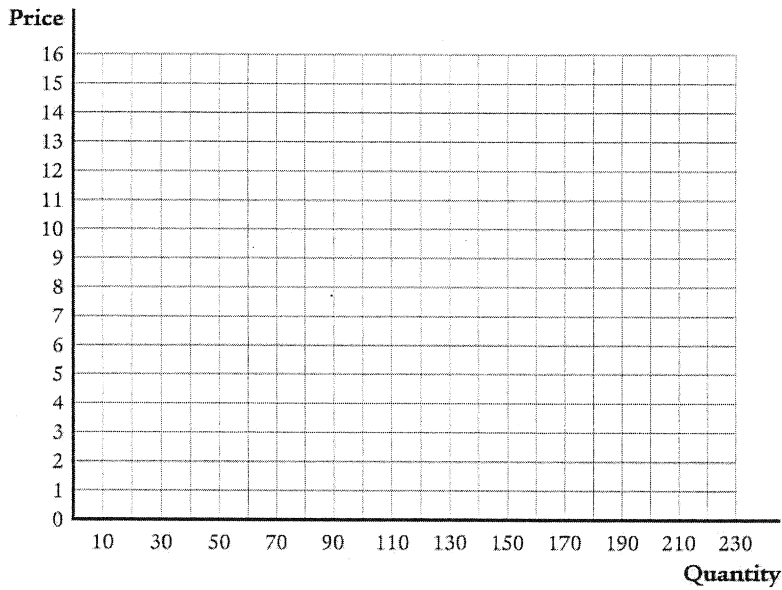


Problem Set 2.4

Shifting Supply and Demand

The supply and demand schedules for Ben Bernanke T-Shirts are given in the following table:

PRICE	QUANTITY SUPPLIED	QUANTITY DEMANDED
\$15	150	10
13	130	30
11	110	50
9	90	70
7	70	90
5	50	110
3	30	130
1	10	150



1. On the graph provided, plot the quantity demanded at each price. Draw a line to connect the plotted points and label the resulting demand curve "Demand 1."
2. Suppose a rise in the popularity of Ben Bernanke T-Shirts increases the quantity demanded at each price by 70. Plot the new demand curve and label it "Demand 2."
3. Now suppose a substitute for Ben Bernanke T-shirts, Alan Greenspan T-Shirts, is offered for sale in the market. Relative to Demand 2, the availability of substitutes reduces the quantity demanded of Ben Bernanke T-Shirts by 40 at each price. Plot the new demand curve and label it "Demand 3."

4. What will happen to the demand for Ben Bernanke T-Shirts as shown by Demand 3 if the price of Ben Bernanke T-Shirts increases from \$9 to \$11?
5. On the graph provided, plot the quantity supplied at each price. Draw a line to connect the plotted points and label the resulting supply curve "Supply 1."
6. Suppose that new technology makes these T-Shirts less expensive to produce. At each price the quantity supplied increases by 60. Plot the new supply curve and label it "Supply 2."
7. Now suppose that one of the firms producing Ben Bernanke T-Shirts goes out of business. Relative to Supply 2, this reduces the quantity supplied of Ben Bernanke T-Shirts by 30 at each price. Plot the new supply curve and label it "Supply 3."
8. What will happen to the supply of Ben Bernanke T-Shirts as shown by Supply 3 if the price of Ben Bernanke T-Shirts increases from \$9 to \$11?

Use the graph you have drawn to approximate the answers to questions 9 – 12 as closely as possible.

9. Identify the initial price and quantity of T-Shirts at the equilibrium of Supply 1 and Demand 1.
10. What is the new equilibrium price and quantity when demand shifts to Demand 2 if supply remains at Supply 1?
11. What is the new equilibrium price and quantity when supply shifts to Supply 2 if demand remains at Demand 2?
12. What is the new equilibrium price and quantity when demand shifts to Demand 3 and supply shifts to Supply 3?