

The Digital Economist

Intermediate Microeconomics

Worksheet #1: **Markets**

Name: _____

1. Given the following equations representing the behavior of producers and consumers:

$$\text{Consumers: } Q_d = 100 - 6P$$

$$\text{Producers: } Q_s = 4P$$

Complete the following table:

| Price | Quantity Demanded | Quantity Supplied | Difference |
|-------|-------------------|-------------------|------------|
| 16 | | | |
| 14 | | | |
| 12 | | | |
| 10 | | | |
| 8 | | | |
| 6 | | | |
| 4 | | | |
| 2 | | | |
| 0 | | | |

a. What price corresponds to the *equilibrium price* for this market: _____

What is the *equilibrium quantity*? _____

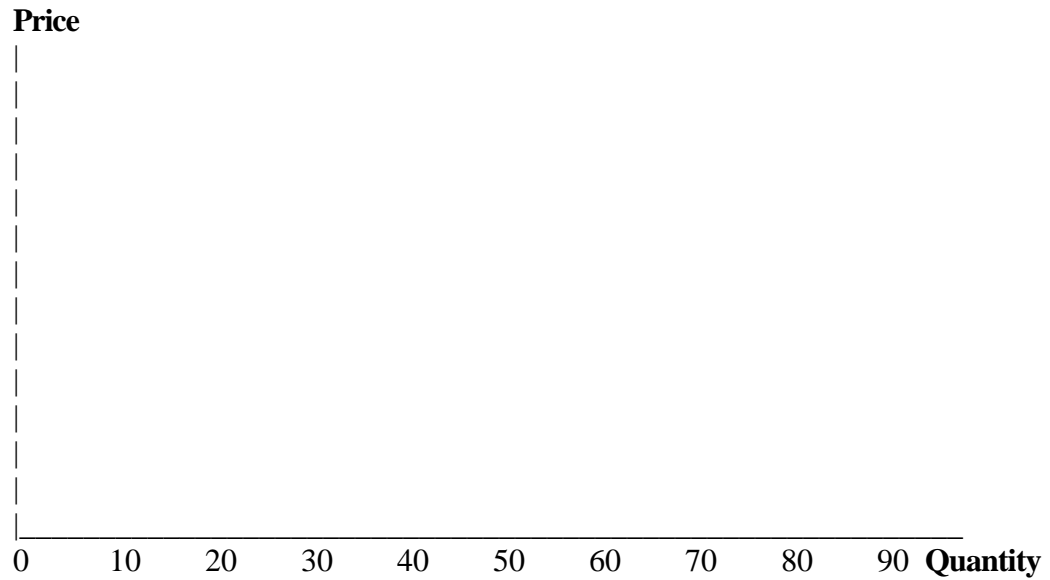
b. Over what range of prices does a *Surplus* result? _____

c. Over what range of prices does a *Shortage* result? _____

d. If a surplus exists, explain the process by which market prices will adjust?

Will these prices adjust upwards or downwards? _____

e. On the next page, graph the above price and quantity data and carefully label the Supply curve, Demand curve, Equilibrium price, and Equilibrium quantity.



2. Use arrows to describe an increase or decrease in equilibrium quantity Q_e and equilibrium price P_e in the middle columns given the "events" described for the following markets. If the resulting impact on price or quantity cannot be determined, use a question mark in place of arrows. In the last column, describe whether the event affects the *supply-side*, the *demand-side* of the market or *both-sides* of the market.

| | Market | Event | Q_e | P_e | Supply/ Demand Side |
|----|---------------------------|--|-------------------------|-------------------------|--------------------------------|
| A. | <i>Oranges</i> | An unexpected freeze destroys the Orange Crop: | _____ | _____ | _____ |
| B. | <i>Personal Computers</i> | The price of Internet Access is reduced: | _____ | _____ | _____ |
| C. | <i>Autos</i> | An increase in the price of gasoline <u>and</u> an improvement in production technology: | _____ | _____ | _____ |
| D. | <i>Housing in Boulder</i> | Zoning laws restrict new construction within the Boulder City limits: | _____ | _____ | _____ |
| E. | <i>Restaurant Meals</i> | The government mandates a 10% increase in wages <i>And</i> incomes: | _____ | _____ | _____ |