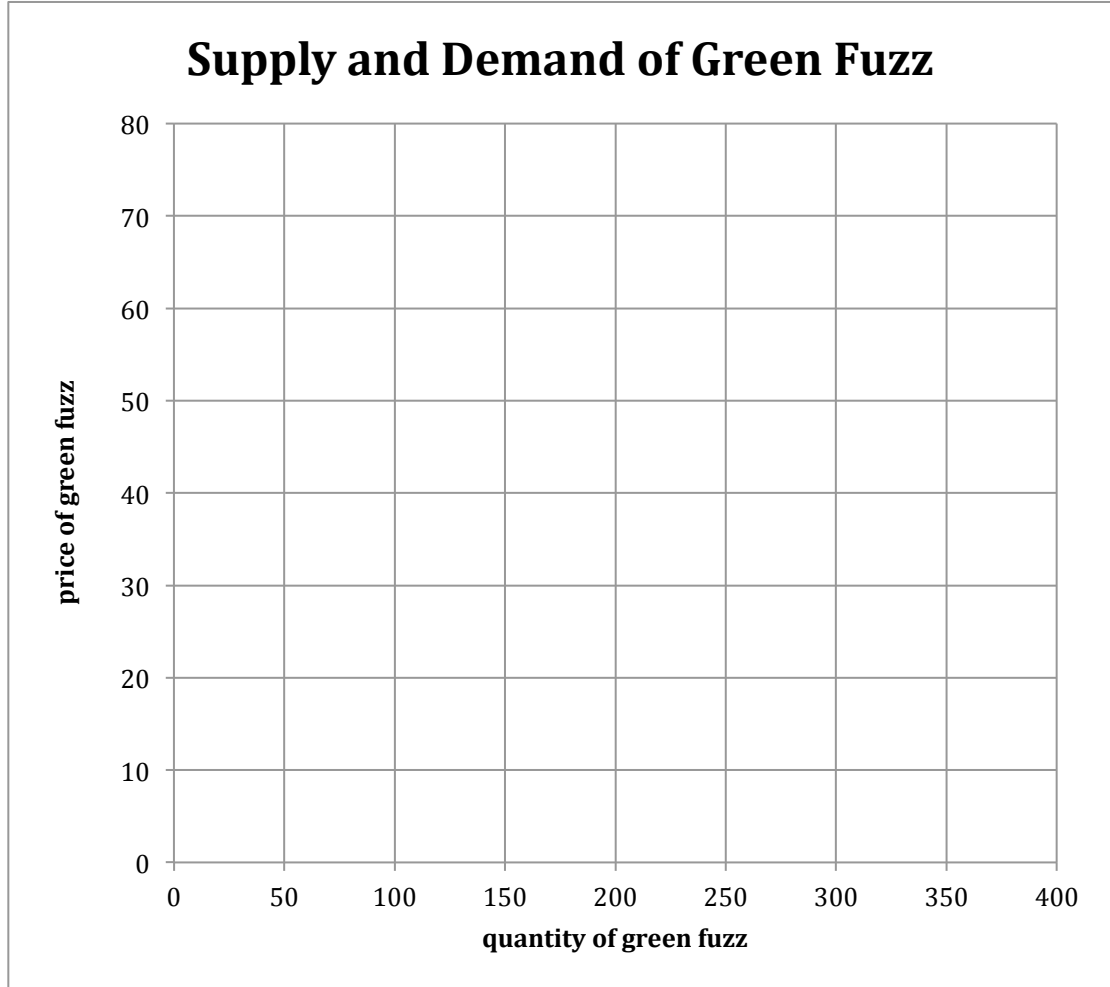


In the market for green fuzz, quantity supplied and quantity demanded are given by:  $Q_s = 5P - 50$  and  $Q_d = 400 - 10P$ .

- Suppose the government imposes a price ceiling at  $P = \$20$ . In the graph below, draw the supply and demand curves, and the price ceiling. Label the resulting consumer surplus, producer surplus, and deadweight loss from the price ceiling.



- What is the amount of the deadweight loss caused by this price ceiling?  
\$ \_\_\_\_\_

In the market for pinot grigio, the inverse demand curve is  $P=100 - 2Q$ , and the inverse supply curve is  $P=25+Q$ , where  $Q$  is measured in gallons of pinot grigio.

3. If the government imposes a \$15 per gallon tax on pinot grigio, the price buyers will have to pay for a gallon of pinot grigio is \$\_\_\_\_\_, and the price sellers receive is \$\_\_\_\_\_.
4. The deadweight loss from the tax on pinot grigio is \$\_\_\_\_\_.

A perfectly competitive firm producing widget polish has the following cost structure:

- $FC = 200$
- $VC = 20Q + Q^2$
- $TC = 200 + 20Q + Q^2$
- $MC = 20 + 2Q$

5. If the market price for widget polish is \$80, this firm should produce \_\_\_\_\_ units of widget polish.
6. If the market price for widget polish is \$80, this firm will make a profit of \$\_\_\_\_\_.

Suppose the demand schedule for paintings of dogs playing poker is given below:

Quantity	MB (or max price)
1	\$70
2	\$65
3	\$60
4	\$55
5	\$50
6	\$45
7	\$40

The marginal cost of producing a painting of dogs playing poker is \$42, and there are no fixed costs.

7. A perfectly competitive firm (in long run equilibrium) would produce \_\_\_\_\_ paintings and sell them for \$\_\_\_\_\_ each.
8. A monopolist would produce \_\_\_\_\_ paintings and sell them for \$\_\_\_\_\_ each.
9. The deadweight loss from monopoly in the paintings of dogs playing poker market is \$\_\_\_\_\_.
10. Suppose a monopolist has a constant marginal cost of \$6. It faces an inverse demand curve of  $P=30-Q$ , and therefore a marginal revenue curve of  $MR=30-2Q$ . This monopolist would supply \_\_\_\_\_ units for a price of \$\_\_\_\_\_ each.