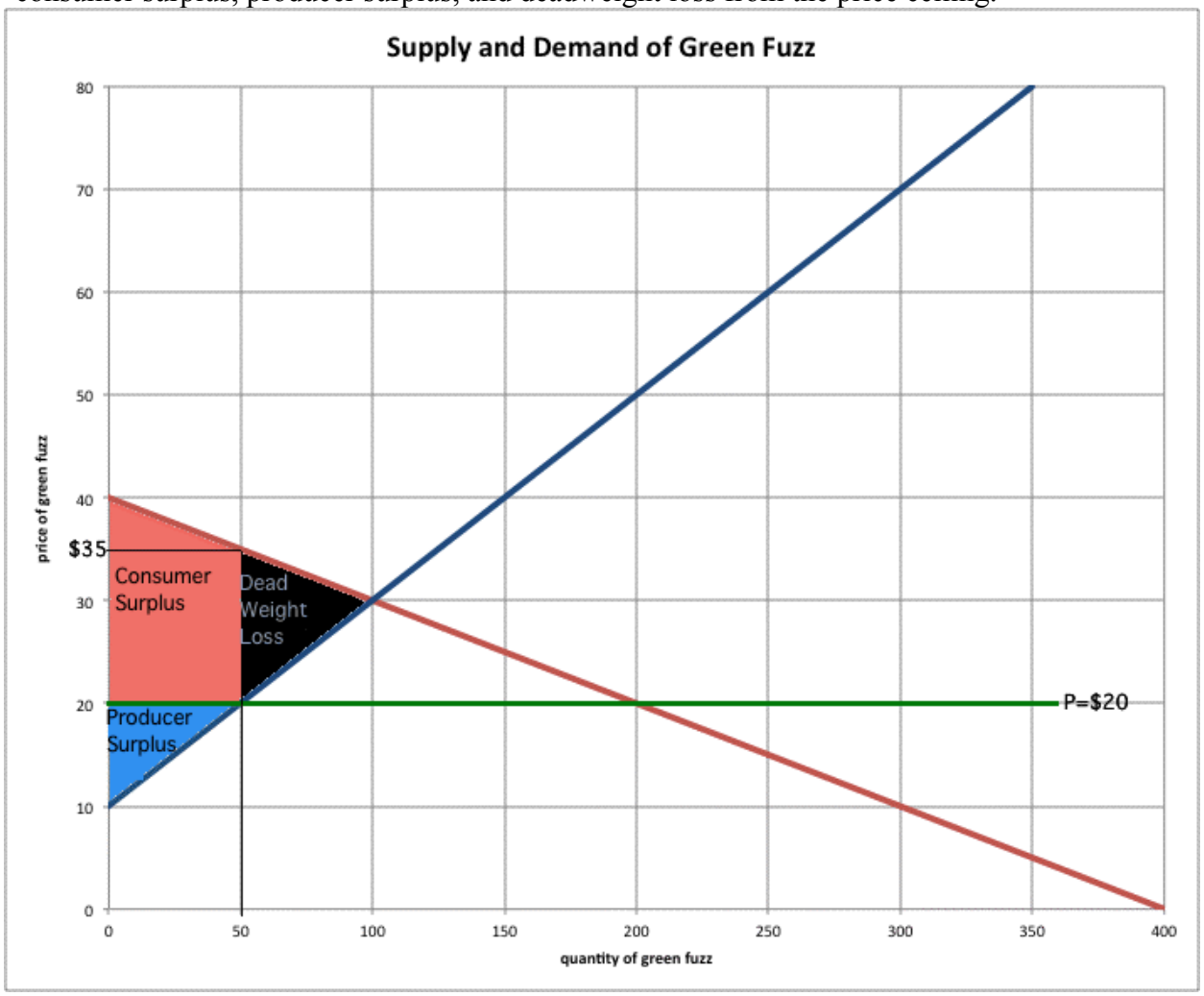
Econ 1 M10
Quiz 4 Name_____ Perm_____

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

1. 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.



2. What is the amount of the deadweight loss caused by this price ceiling?
$375

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 __**$60**_, and the price sellers receive is ___**$45**___.
4. The deadweight loss from the tax on pinot grigio is ___**$37.50**____

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 _**30**___ units of widget polish.
6. If the market price for widget polish is $80, this firm will make a profit of ___$**700**___.

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 __**6**___ paintings and sell them for __**$42**_ each.
8. A monopolist would produce ___**3**___ paintings and sell them for __**$60**___ each.
9. The deadweight loss from monopoly in the paintings of dogs playing poker market is ____**$24**_____.
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 _**12**_ units for a price of __**$18**___ each.