

Intro Microeconomics | Homework B

Due Friday September 16

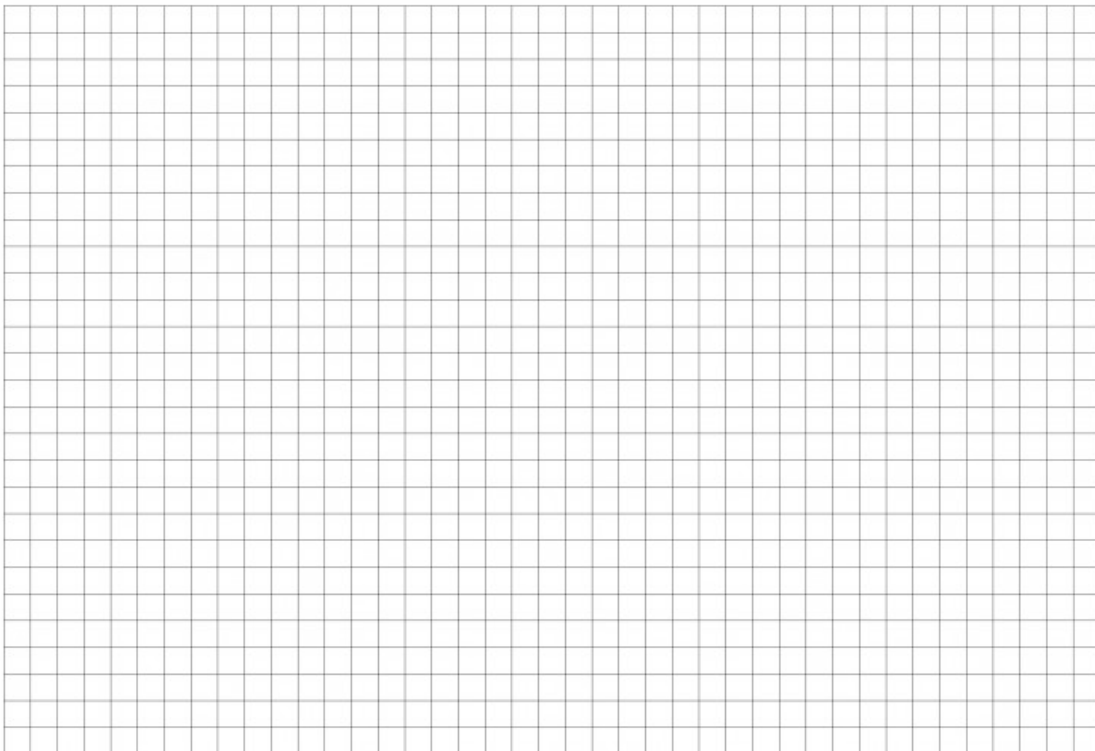
Homework is designed to both test your knowledge and challenge you to apply familiar concepts in new applications. Send me your questions at taylorjweidman@pitt.edu. Answer clearly and completely; show your work so I can understand your thought process for partial credit; you are welcomed and encouraged to work in groups as long as your work is your own.

Question 1

Wizards and witches enjoy pumpkin pasties for both the nostalgic taste and its satiating qualities. These preferences for the good can be represented by the following demand curve:

$$P_d = 17 - \frac{1}{6}Q_d$$

Use a graph to plot this demand curve, including the quantity demanded at both 5 galleons and 10 galleons. Then find and label the consumer surplus at these prices.



CS at 5 galleons:_____

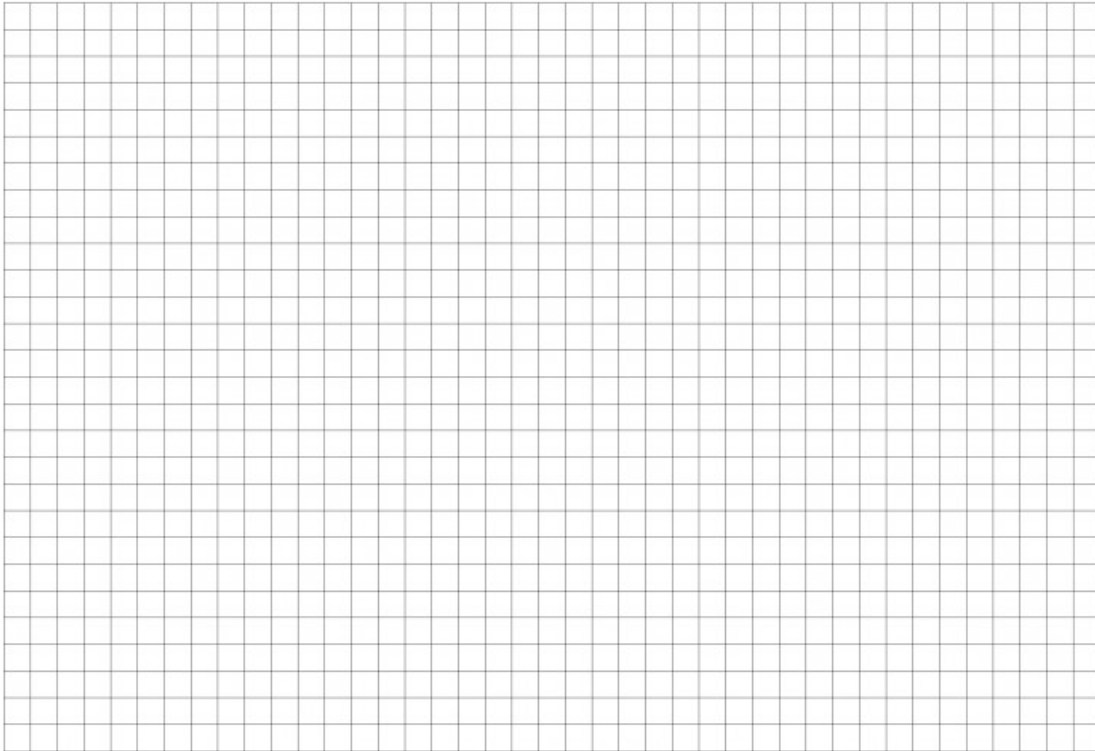
CS at 10 galleons:_____

Question 2

Pumpkin pasties are easy to make and don't require much skill or equipment to make. Because of this pumpkin pasties are widely available. The supply curve for pumpkin pasties can be represented by the following equation:

$$P = 2 + \frac{2}{3}Q$$

Use a graph to plot this supply curve, and find and label the producer surplus at both 5 galleons and 10 galleons.

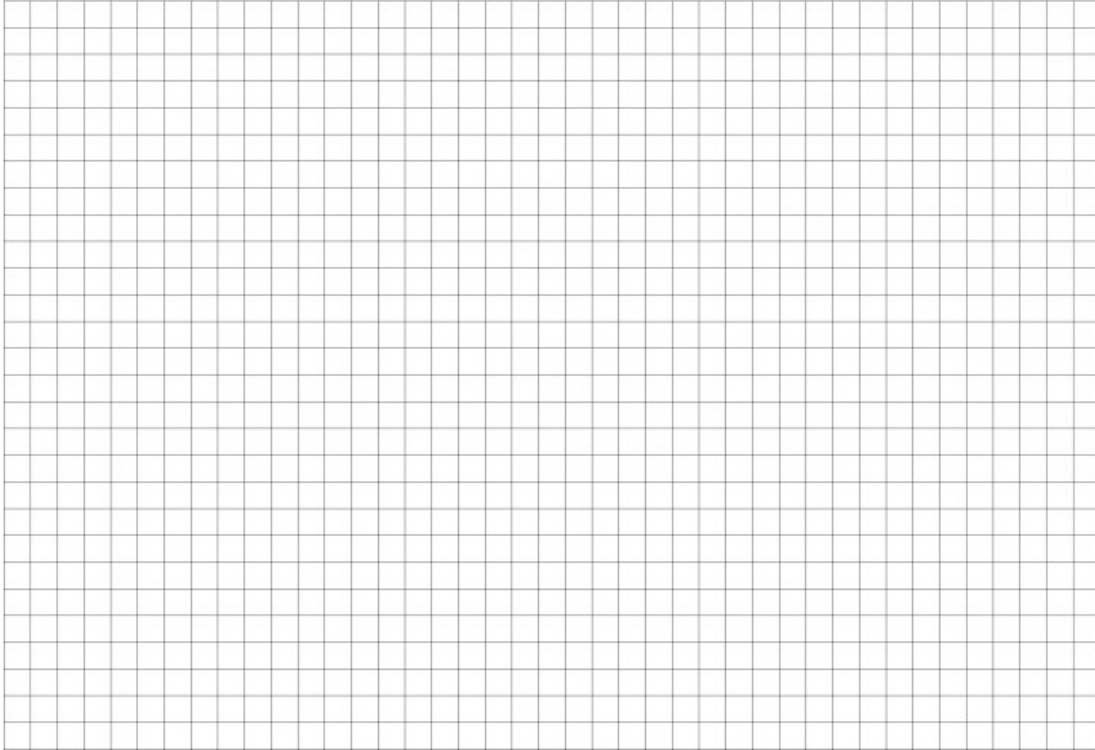


PS at 5 galleons: _____

PS at 10 galleons: _____

Question 3

What is the market equilibrium price, quantity of pumpkin pasties, and total surplus? Use a graph and algebra to analyze this market.



P*: _____

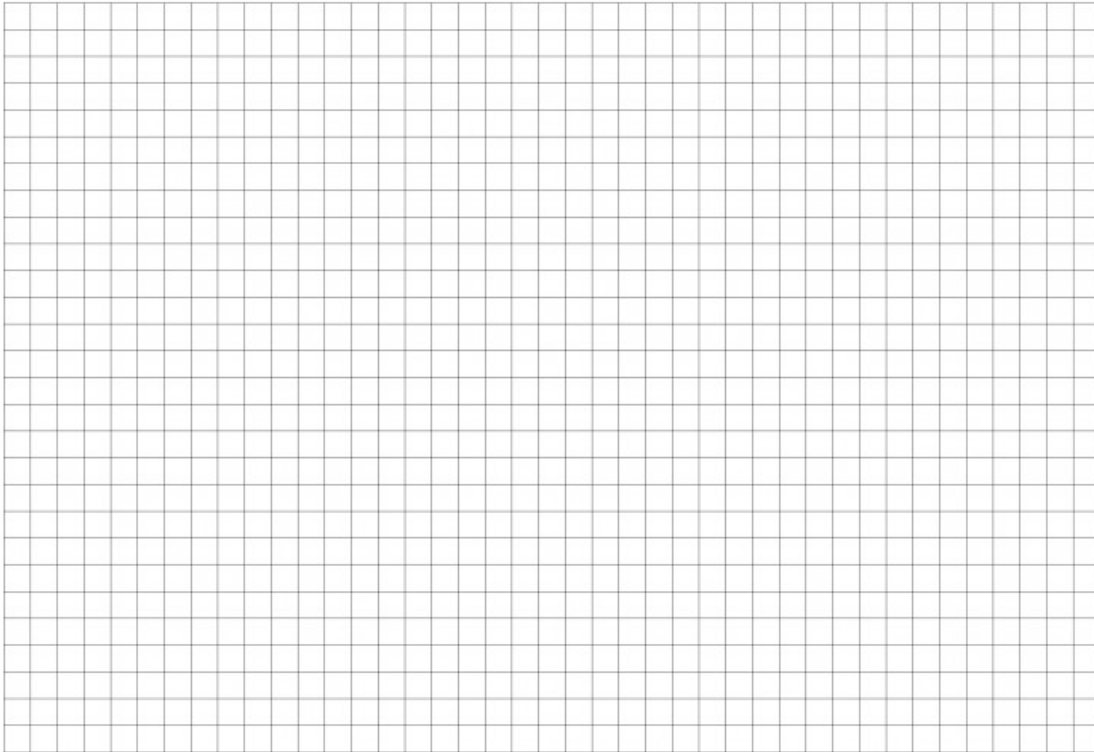
Q*: _____

TS: _____

Question 4

After years of careful epidemiological analysis, a subcommittee of the Ministry tasked with improving the health and wellbeing of the wizarding community published a story in the Daily Profit establishing a link between the consumption of pumpkin pasties and accidental magical spell casting by wizards and witches in public areas. These unintended mishaps were understandably embarrassing for those involved. Use a graph to discuss the effect this study and its publishing had on the pumpkin pastie market.

*Note: assume there are no externalities, which we'll cover next week; pumpkin pasties are a private good; the market is competitive.



Demand: UP, CONSTANT, DOWN

Supply: UP, CONSTANT, DOWN

Prices: UP, CONSTANT, DOWN

Quantity: UP, CONSTANT, DOWN