Econ 101 | Demo B4

Demos are similar to MiniExams, often taken directly from past semesters. The goal is to both test your knowledge and provide a venue for practice. Work through the problems and check your work against mine. Send me questions at tweidman@richmond.edu. Practice answering clearly and completely. Show your work so someone else can understand your thought process. You are encouraged to work in small groups. Find a study room, grab some classmakes, and work together on a whiteboard.

Cauldrons For Days

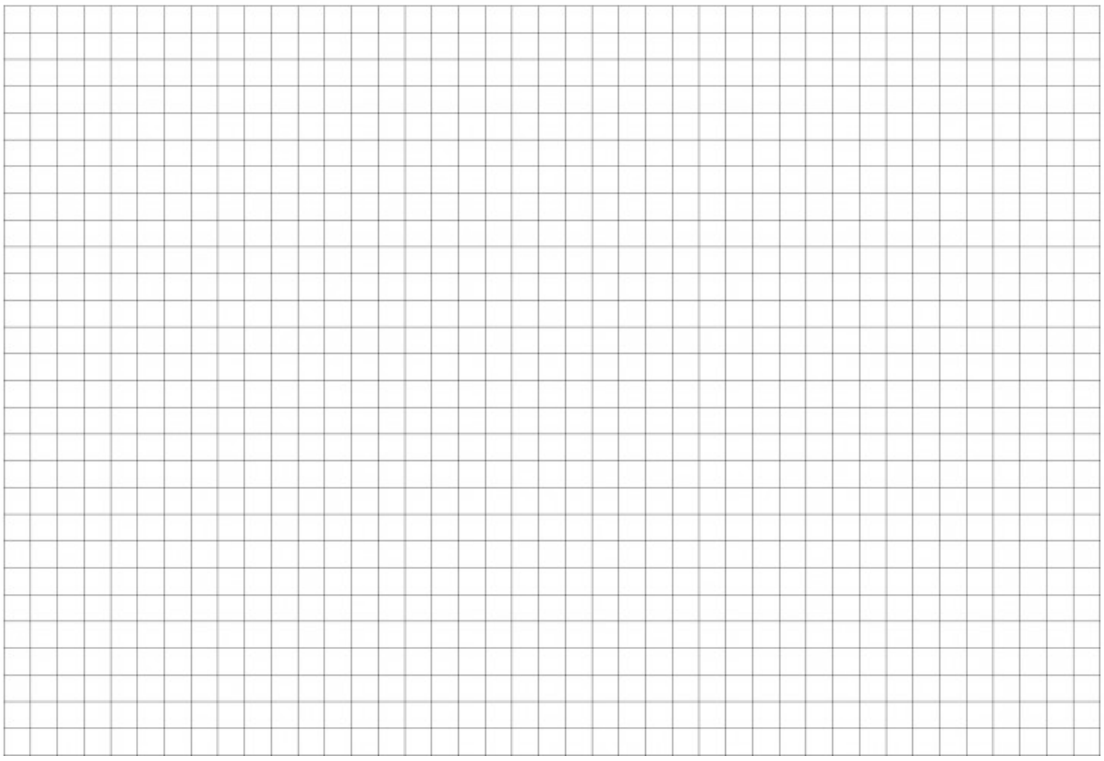
The standard cauldron is a magical tool used widely in the making of various potions with many buyers and many sellers. The demand and supply curves for the standard cauldron can be represented by the following relationships:

$$D : P = 25 - \frac{1}{5}Q_d$$

$$S : P = \frac{4}{5}Q_s$$

Question 1. Standard Cauldron Equilibrium

Use a graph and algebra to find equilibrium price and equilibrium quantity. Include but don't calculate welfare.



Question 2. Self-Stirring Cauldron

One terribly cold winter, a remarkable invention was made: the self-stirring cauldron. Cauldrons are typically used for potions involving much stirring, so this invention was widely appreciated, especially since it was no more costly to produce than a standard cauldron. Many witches and wizards ended up using this new type of cauldron instead of the standard cauldron. Use a graph to discuss what happened to the standard cauldron market after the invention. No need to use numbers here.

Question 3. Metal Alloy Technique

Cauldrons are made from a particular combination of metals. After (but unrelated to) the invention of the self-stirring cauldron a new mining technique increased the availability of these metals. Use a graph to discuss what happened to the standard cauldron market after both the invention of the self-stirring cauldron and the new mining technique. No need to use numbers here.

Question 4. Price Floor

The Ministry of Magic grew concerned that standard cauldrons had become too inexpensive to support their manufacture after the development of the new metal alloy technique and the invention of the self-stirring cauldron. So a binding price floor was instituted with the intention of allowing more firms to produce them.

Use a graph to illustrate what effect this policy had on the standard cauldron market after the Self-Stirring Cauldron and Metal Alloy Technique. Be sure to discuss the welfare effects of the policy. Be as specific as possible. No need to use numbers here.