Econ 0100 | Homework A

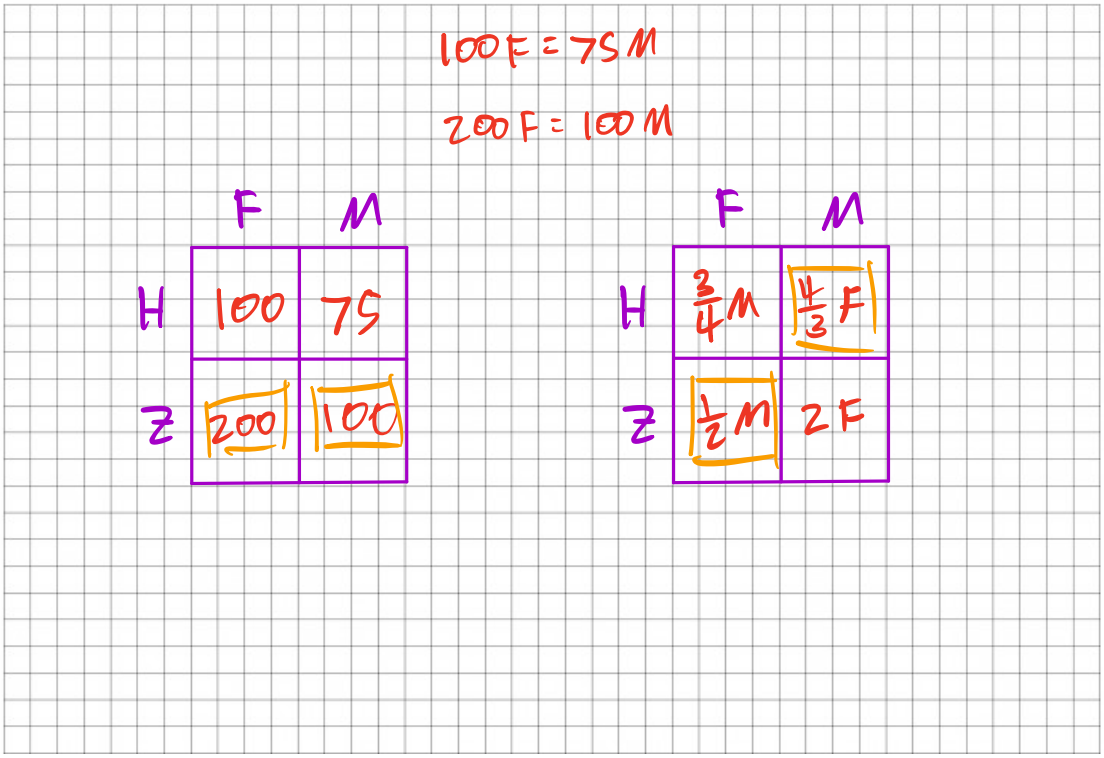
Due: Friday, Sept 8

Homework is designed to both test your knowlege and challenge you to apply familiar concepts in new applications. 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.

The Hogsmeade Candy Shop Saga

Q1 | Advantages

Honeydukes and Zonkos are two candy shops in Hogsmeade, the only all-wizarding village in Britain. Both Honeydukes and Zonkos are operated by their owners and make two types of popular candy, Chocolate Frogs (F) and Ice Mice (M). Honeydukes, devoting all their resources to either good, can make 100 pounds of F or 75 pounds of M. Zonkos can make 200 pounds of F or 100 pounds of M. Which shop has the absolute advantage (AA) in Ice Mice, M? Which shop has the comparative advantage (CA) in Ice Mice, M? Two tables may be helpful in answering this question.



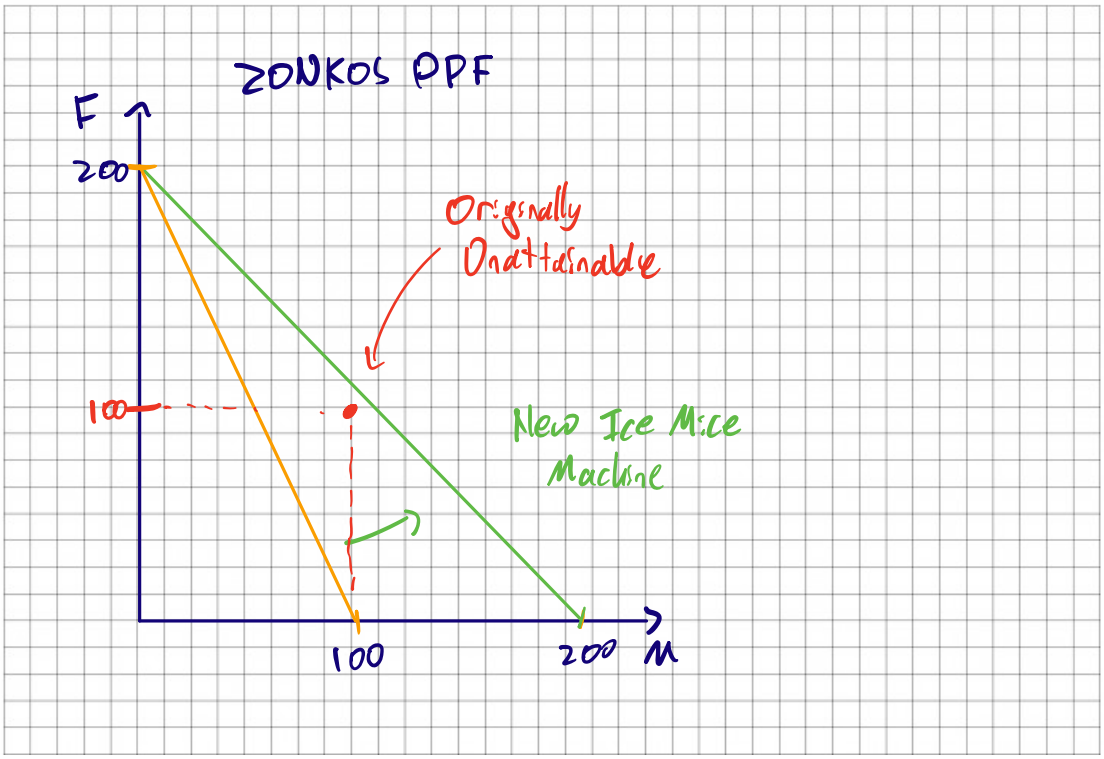
Zonkos has the absolute advantage in Ice Mice.

Honeydukes has the comparative advantage in Ice Mice.

Q2 | Investment Pressure

Zonkos investors at Gringots bank, a famously reliable institution, asked the candymaker to produce a total of $100F$ and $100M$. With Zonkos' current technology and labor, is this level of production attainable?

Use a graph to justify your answer with F on the vertical and M on the horizontal.



Q3 | New Technology

After realizing this level of production isn't possible for Zonkos, investors at Gringots fund Zonko's purchase of a more capable Ice Mice machine, doubling Zonkos Ice Mice production. Plot this shift on Zonko's PPF in Q2 above.

SHOWN ABOVE

Q4 | Post-Technology Trade

After Zonkos adds the Ice Mice machine to their production line, who has the comparative advantage in Ice Mice? If the two companies decide to specialize in one good, trade, and sell each other's goods at their shops, what's an exchange rate that would facilitate a trade of Ice Mice for Chocolate Frogs?

200F = 200M
1F = 1M

	F	M
H	100	75
Z	200	200

	F	M
H	$\frac{3}{4}$M	$\frac{4}{3}$F
Z	1M	1F

The new machine has changed the opportunity costs such that Zonkos now has the comparative advantage in Ice Mice.

Any exchange rate between their op. costs:

$$\frac{3}{4}M < xM < 1M$$

so $\frac{7}{8}M$ for 1F would work.