Econ 101 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Summer 2014

Quiz #1

Please write all answers neatly and legibly.

1. Jason and Olivia both produce jam (J) and butter (B) and both of their production possibility frontiers are linear with respect to these two goods. If Jason uses 20% of his resources (his labor) for jam production and 80% of his resources (his labor) for butter production he can produce 5 units of jam and 20 units of butter. If Olivia uses 50% of her resources (her labor) for jam production and 50% of her resources (her labor) for butter production she can produce 10 units of jam and 20 units of butter. Assume that labor is the only resource needed by Jason or Olivia to produce jam or butter.

a. (2 points) Given the above information, write an equation for Jason’s production possibility frontier in slope intercept form where jam (J) is measured on the vertical axis and butter (B) is measured on the horizontal axis. For full credit provide an explanation for how you found your answer.

b. (2 points) Given the above information, which person has the comparative advantage in the production of jam? Explain your answer.

c. (2 points) In the space below draw the joint production possibility frontier for Jason and Olivia measuring jam (J) on the vertical axis and butter (B) on the horizontal axis. Make sure all intercepts, all “kink” points, and all axis are labeled.

d. (2 points) If these two individuals decide to specialize according to comparative advantage and then trade with one another what will be the range of trading prices that 20 units of jam will trade between?

e. (2 points) Given the above information, if Jason uses only labor to produce butter and jam and Jason has a total of only 40 hours of labor available each week for butter and jam production, how many hours of labor does it take Jason to produce one unit of jam? Explain your answer.