

1. Suppose that there are two countries, Island and Mainland, that both produce bananas (B) and fishing boats (FB). Each of these countries have linear production possibility frontiers: Island's opportunity cost of producing bananas is equal to  $\frac{1}{2}$  fishing boat. Island, given its resources, can produce a maximum of 10 fishing boats in the time period under consideration. Mainland's opportunity cost of producing fishing boats is equal to  $\frac{4}{5}$  unit of bananas. Mainland, given its resources, can produce a maximum of 100 fishing boats in the time period under consideration.
  - a. (1 point) In the space below draw Island's PPF for bananas and fishing boats. Measure bananas on the horizontal axis and fishing boats on the vertical axis. Be sure to identify the numeric values of the two intercepts in your drawing.

b. (1 point) In the space below draw Mainland's PPF for bananas and fishing boats. Measure bananas on the horizontal axis and fishing boats on the vertical axis. Be sure to identify the numeric values of the two intercepts in your drawing.

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d. (4 points) In the space below, construct the joint PPF for these two countries. In your drawing provide the x-intercept and the y-intercept. Also, in your drawing provide the coordinates of any kink point. Indicate in your drawing the point or points where both countries completely specialize in producing bananas, the point or points where both countries completely specialize in producing fishing boats, and the point or points where both countries completely specialize according to their comparative advantage. For the point(s) that represent specialization according to comparative advantage indicate what good each country is producing.

e. (2 points) Using a number line (like the one we used in class) provide a pictorial representation of the acceptable range of trading prices for 20 units of bananas in terms of fishing boats. In your diagram be sure to represent what each country's perspective is by including an arrow that indicates the particular country's perspective.