Answer on these sheets. Use the indicated point values as a guide to how extensively you should answer each question, and budget your time accordingly. Note that the last page of the exam (page 8) is intentionally left blank for you to use if you run out of space to answer any of the questions, although I do not intend that you should need it.

The exam has a total of 60 points.
1. (10 pts.) Define any five (5) of the following seven terms. (If you answer more than 5, I will grade only the first 5, so be sure to cross out any answers you don’t want me to grade.)

   a. Vertical FDI:

   b. Balance on Financial Account:

   c. Purchasing Power Parity:

   d. Specific tariff:

   e. Effective rate of protection:

   f. National treatment:

   g. Terms of trade:
2. (14 pts) The figure at the right shows the domestic market for a good in a small country, facing a world price of $P_0^w$ and levying a tariff, $t$. Using the labeled areas in the figure, identify the following effects of the tariff compared to free trade always using a plus (+) or minus (−) sign to indicate the direction of the change:

a. The change in revenue of suppliers:

b. The change in total cost of suppliers:

c. The change in producer surplus of suppliers:

d. The change in expenditure by demanders:

e. The change in consumer surplus of demanders:

f. The change in tariff revenue:

g. The change in welfare of the country as whole:
3. (10 pts) Write a short essay explaining the Prisoners’ Dilemma and its relevance for understanding the need for, and then the functioning of, the World Trade Organization.
4. (10 pts) Write a short essay on Trade Promotion Authority and its relevance for trade policy in the world today. Include answers to the following questions:

   a. What is TPA?
   b. Why is it needed?
   c. Does it currently exist?
   d. How does it matter for current policies and/or negotiations?
5. (11 pts) Switzerland produces no wine but it produces a lot of cheese, which for the purpose of this question it neither imports nor exports. Wine and cheese are complements. The graphs below show the Swiss domestic markets for (non-traded) cheese and for imported wine, with wine infinitely elastically available for the world price $P^W_0$.

\begin{figure}
\centering
\begin{tikzpicture}
  \begin{axis}[
    title={Swiss Cheese},
    xlabel={$Q^C$},
    ylabel={$P^C$},
    xmin=0, xmax=100,
    ymin=0, ymax=200,
    xtick={0,50,100},
    ytick={0,50,100},
    xticklabels={0,50,100},
    yticklabels={0,50,100},
    xticklabel style={font=\footnotesize},
    yticklabel style={font=\footnotesize},
    legend pos=north east,
    legend style={font=\small},
    \end{axis}
  \end{tikzpicture}
\begin{tikzpicture}
  \begin{axis}[
    title={Imported Wine},
    xlabel={$Q^W$},
    ylabel={$P^W$},
    xmin=0, xmax=100,
    ymin=0, ymax=200,
    xtick={0,50,100},
    ytick={0,50,100},
    xticklabels={0,50,100},
    yticklabels={0,50,100},
    xticklabel style={font=\footnotesize},
    yticklabel style={font=\footnotesize},
    legend pos=north east,
    legend style={font=\small},
    \end{axis}
  \end{tikzpicture}
\end{figure}

a. Supply and demand curves are labeled in the figure, but their arguments have been omitted. Fill those in. That is, on what do each of these supplies and demands depend?

b. Show in the figure the effects of a tariff on imports of wine and on the quantity and price of cheese. Who gains and who loses (no need to say how much) from the tariff?

c. Is there anyone in this scenario who would be expected to lobby for this tariff?
6. (5 pts) A basic result of simple models of microeconomics is that a monopoly produces a smaller output than would be optimal. A basic result of second-best trade theory is that a tariff or other trade restriction may be beneficial when it acts in the direction of correcting a market distortion. Is it therefore the case that, when an import-competing industry has only a single firm, a tariff – by expanding that firm’s output – may improve the country’s welfare? Why or why not?