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## Midterm 1

You have until 3:20pm to complete the exam, be certain to use your time wisely. Answer all questions directly on the exam. Calculators may not be used. Remember to put your name on the exam. Good luck!

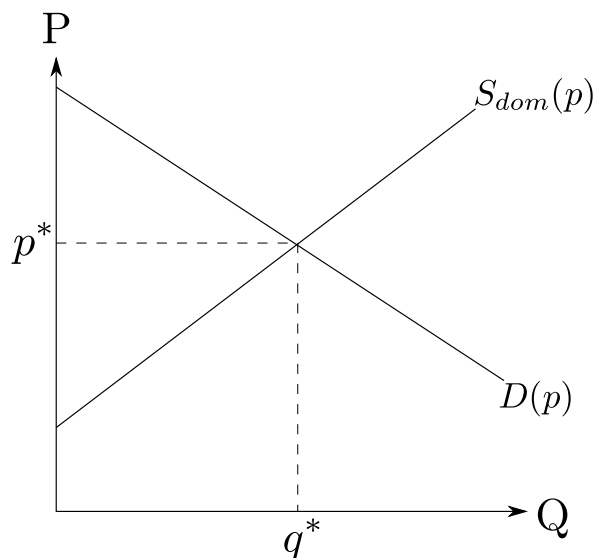
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**Name:**

**ID Number:**

1. (15 points) One of Sawers' main critiques of Thomas was that his measure of the net per capita burden of empire membership was not an appropriate metric to assess whether the economic costs of empire membership were a major factor leading to revolution.
  - (a) Explain why Sawers thinks that the burden per capita is not a useful statistic when evaluating the role of economics as a motive for revolution.
  - (b) Propose an alternative quantitative measure of the burden of empire membership that would not suffer from the issues you discussed in part (a). Explain how your measure would be constructed and why it would be a more appropriate measure for testing whether economic interests were a major reason for the Revolutionary War.

2. (25 points) Below is a graph showing America's demand curve for textiles,  $D(p)$ , and America's domestic supply curve for textiles,  $S_{dom}(p)$ . Assume that initially America engages in no international trade whatsoever, leading to an equilibrium price of a unit textiles of \$50 and an equilibrium quantity of textiles of 200 units.



- (a) Suppose that the world price for a unit of textiles is currently \$40. On your graph below, label the new equilibrium price of textiles ( $p'$ ), the new quantity of textiles consumed in America ( $q'$ ), and the portion of that quantity provided by domestic producers ( $q'_{dom}$ ) if the United States opens up to international trade with no tariffs. Use specific numbers where possible.
- (b) Now suppose that the United States introduces a tariff of \$5 on each unit of imported textiles. On the graph, show the effects this will have on the producer surplus of American textile manufacturers.
- (c) Suppose that while this tariff is in place, the protection afforded to the domestic textile industry allows for significant learning by doing to take place in the industry. Assuming the government continues to impose a tariff of \$5, explain how you would expect the graph to change over time. Be certain to explain any changes to the curves themselves and to any of the relevant prices and quantities.

3. (10 points) Explain two ways in which the Constitution helped foster an integrated national economy.

4. (15 points) Consider the following quote from Federalist No. 35 providing two arguments against excessive tariffs on imports:

*“[Exorbitant duties on imported articles] tend to render other classes of the community tributary, in an improper degree, to the manufacturing classes, to whom they give a premature monopoly of the markets; they sometimes force industry out of its more natural channels into others in which it flows with less advantage...”*

- (a) Consider the first argument in the quote. Which ‘classes of the community’ tended to be hurt by high duties on imports and which tended to benefit from high duties on imports? Be certain to explain why each class was either hurt or helped.
- (b) Explain the economic logic underlying the second argument.

5. (15 points) Consider the Malthusian trap we discussed in class, the situation in which any income gains are only temporary because they are ultimately eroded by population growth.
- (a) Explain why population growth eroded gains in income per capita in the pre-industrial world. You may include graphs with your explanation if helpful but they are not necessary.
  - (b) Why were the American colonies able to escape the Malthusian Trap and experience growing income per capita at the same time as rapid population growth? Be certain to fully explain your answer.
  - (c) In the second half of the twentieth century the United States also experienced growing income per capita at the same time as a growing population. Why was the United States not in a Malthusian Trap during this more recent period?

6. (20 points) When estimating the burden of the Navigation Acts on colonial exporters, Robert Paul Thomas had to make fairly strong assumptions about the elasticity of demand. Use a graph with quantity of tobacco on the horizontal axis and the price of tobacco on the vertical axis to show whether Thomas would have over- or underestimated the burden on colonial exporters if the true elasticity of demand was more inelastic than Thomas assumed. Be certain to clearly label your graph and include a brief written explanation of your answer. (Note: The more inelastic demand is, the steeper the demand curve will be.)