ME170 Lecture Class Assignment #1

Name: ........................................

Lab Section (AB#): ............... 

1. What Material (incl. form) and Manufacturing Process is the LEFT PANEL of the Toaster made from:
   a. Plastic – Injection Molding 
   b. Sheet Metal (Steel) – Stamping 
   c. Steel Tube – Tube Bending and Machining 
   d. Steel Bar Stock – Machining 
   e. Aluminum - Casting 
   f. Steel - Casting 

2. How much would the LEFT PANEL cost to manufacture (Piece Part cost - i.e. Fully burdened cost) in the US if made from:
   1. Steel $:
   2. Steel with Powder Coat Paint $:
   3. Stainless Steel $:
   4. Aluminum $:
      - Do you think it would be strong enough out of Aluminum? Yes or No
      - Roughly much thicker would it have to be? 1x or 2x or 3x

3. Why might it be a bad idea to Injection Mold this part out of Plastic?

4. What Material and Manufacturing Process is the RIGHT COVER of the Toaster made from:

5. How much would the Right Cover cost to manufacture in a single-cavity mold:
   - in the US - Part Cost$: Investment Cost (Tooling/Mold cost)$:
   - in China - Part Cost$: Investment Cost (Tooling/Mold cost)$: