

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. Stainless Steel \$:

3. Aluminum \$:

3. Do you think it would be strong enough out of Aluminum if we don't make it thicker? **Yes** or **No**

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

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

6. 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)\$: