

ME170 Lecture Class Assignment #13

Name:

Lab Section (AB#):



1. Rapid Prototyping

The size of this part is 53mm x 53mm x 40mm (SER)

The volume is 22,000 mm³ (22 cm³)

How much (\$s) to have one of these printed using SLS by:

- a. Quickparts.com (3d systems) _____
- b. MechSE RP Lab _____
- c. aPriori estimate _____



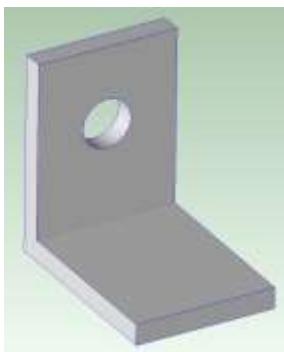
2. Injection Molding:

- a. What is the Material cost? _____
- b. What is the Fully Burdened Cost (optimized number of cavities)? _____
- c. What is the Investment Cost? _____

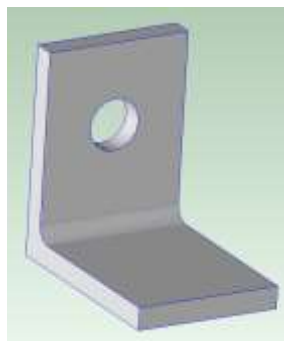
Write down the breakdown of these investment costs that are greater than zero (e.g. Hard Tooling = \$xx ? Fixture Costs = \$xx? etc.)

- d. For USA (optimized number of cavities) _____
- e. For China (optimized number of cavities) _____

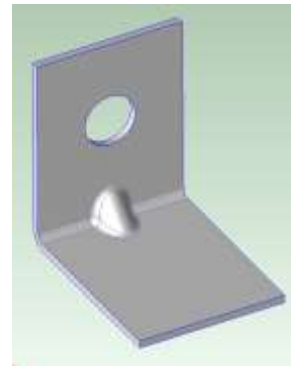
3. Other manufacturing processes (material and form?)



a. ? Stock Machining



a. ? _____



c. ? _____