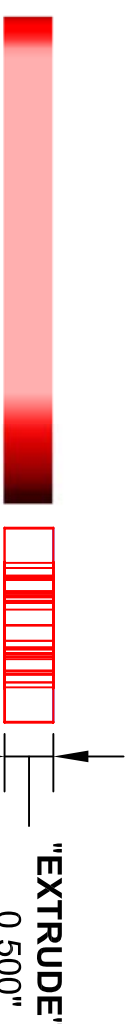


3D DRAWING SET-UP INSTRUCTIONS

1. "EXTRUDE" the 2D shape by 0.5 inch.
2. Be sure to create the holes as shown. "SUBTRACT" them.
3. Assumptions for questions below:
Steel density: 0.283 lbs/cubic inch
Steel price: \$0.38/lb. Waste Material: 20%

3D DRAWING QUESTIONS

1. The volume of the 3D Solid is closest to:
 - a. 2.437 cu. ins.
 - b. 2.347 cu. ins.
 - c. 2.374 cu. ins.
 - d. 3.247 cu. ins.
 - e. 2.743 cu. ins.
2. What is the cost of steel for 1000 pieces of the part with the assumptions shown in note 3 above?
 - a. \$320.88
 - b. \$308.28
 - c. \$312.88
 - d. \$302.88
 - e. \$203.88
3. The weight of one piece is closest to:
 - a. 1.66 lbs.
 - b. 2.66 lbs.
 - c. 0.66 lbs.
 - d. 3.66 lbs.
 - e. 0.99 lbs.
4. The total "TIME" you have spent creating this part is: _____
5. The start Date/Time for your version of this drawing is: _____
6. Use the "SCALE" command to increase the part's size by a factor of 1.2. The new volume of the part is closest to:
 - a. 4.5064 cu. ins.
 - b. 4.0654 cu. ins.
 - c. 4.1564 cu. ins.
 - d. 4.0164 cu. ins.
 - e. 4.0564 cu. ins.

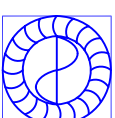


2D DRAWING TIPS*:

1. Draw **LINES** tangent to the 2 biggest circles.
2. "TRIM" away the unwanted part of the circles using the **tangent lines** as a cutting edge.
3. Use "**PEDIT**" to join the slots as one **closed PLINE**. (or "**BOUNDARY**" command to create a new **closed PLINE**.)
4. Use "**OFFSET**" to create the slots.
5. Use "**AREA**" command for Q1 and Q2.
6. Use "**ID**" for coordinates requested in question 3.

3D DRAWING TIPS*:

1. "EXTRUDE" all of the **closed** shapes (PLINES) drawn in 2D by 0.5".
 2. "SUBTRACT" away the holes from the outer bracket shape.
 3. Use "**PROPERTIES**" dialogue to confirm/change if a PLINE is **closed** or not. Only **closed** PLINES can be extruded.
 4. Use "**MASSPROP**" for bracket volume (Q4).
- * These are tips only and do **NOT** include every single step or keystroke to complete the drawing.



THE EKHO INSTITUTE
Ottawa, Canada
Copyright by EKHO



PRACTISE PLATE 2

DWG TITLE		PRACTISE PLATE 2	
CLIENT	THE EKHO INSTITUTE	Rev. 1 More tips added, Instructions 4,5,6 added.	
DWNBY	EKH	DATE: 00/1/24	REV.# 1 DATE: 2002/1/29
CHKD BY	EKH	DATE: 00/1/24	REV. BY: EKH
SCALE: 1:1 on Letter size		SHEET OF 1	
DESIGNED BY: EKH		PROJECT: EH00124	
		DISK: SERVER	