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Tests comprehension of rotary devices

Name: _____

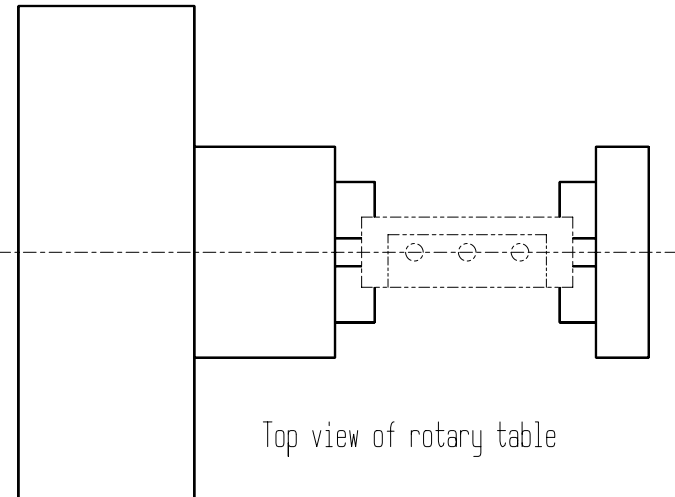
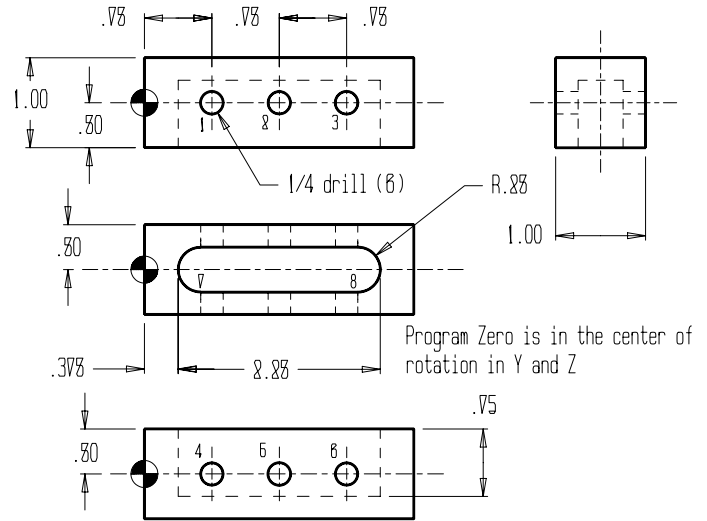
Date: _____

Score (84 possible):

Instructions: *First* study the print, fixture drawing, and process to ensure that you understand what the program will be doing. *Second*, fill in the coordinate sheet. *Third*, write the program. Use the format for a vertical machining center that has fixture offsets.

As you know, rotary devices vary with regard to how they are commanded. For this programming activity, say you have a full rotary axis on the machine. Also, command each rotation in the incremental mode.

Since this workpiece is relatively symmetrical, you need not be overly concerned with workpiece placement. However, we'll say the rotary table must be rotated to the zero return position for easy workpiece loading. Say that the upper view of the workpiece drawing is facing the spindle as the program is activated (as the fixture drawing depicts).



Point	X	Y	Z
1			
2			
3			
4			
5			
6			
7			
8			

Seq.	Operation description	Tool	Station	Speed	Feedrate
1	Center drill (3) holes in upper view	#3 center drill	1	1200 rpm	5.0 ipm
2	Rotate 180 degrees cw				
3	Center drill (3) holes in lower view	#3 center drill	1	1200 rpm	5.0 ipm
4	Drill (3) 1/4 holes in lower view	1/4 drill	2	800 rpm	3.5 ipm
5	Rotate 180 degrees cw				
6	Drill (3) 1/4 holes in lower view	1/4 drill	2	800 rpm	3.5 ipm
7	Rotate 90 degrees cw				
8	Mill 1/2 wide slot	1/2 center cutting end mill	3	600 rpm	5.0 ipm
9	Rotate back to starting side (zero return position)				